Understanding Blended Learning in English Proficiency courses through the Lens of Cultural-historical Activity Theory. A Case Study of a Malaysian Higher Education Institution.

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List of Abbreviations

BL – Blended learning

CEFR – Common European Framework of Reference

CHAT – Cultural-historical Activity Theory

COCU – Co-curricular activity

F2F – Face-to-Face (on-campus environment)

ICT – Information and Communication Technology

MOOC – Massive Open Online Course

MUET – Malaysian University English Test

SPSS – Statistical Package for Social Sciences

SUKSIS – Police Undergraduate Voluntary Corp

TESL – Teaching English as a Second Language

TVET – Technical and Vocational Education and Training

VLE – Virtual Learning Environment

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In the name of Allah, Most Gracious, Most Merciful.

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Declaration

The work in this thesis was developed and conducted by the author between October 2015 and March 2019. I declare that, apart from work whose authors explicitly acknowledged, this thesis and the materials contained in this thesis represent original work undertaken solely by the author. I confirm that this thesis has not been submitted for a degree at any other university.

Parts of this study have been presented on several occasions, including:

1. Exploring blended language learning in the English Proficiency classroom at higher education institution in Malaysia through the lens of Engeström (1987) Activity Theory. In Postgraduate Research Showcase (2016), University of Warwick, United Kingdom.
2. Understanding Blended Language Learning through the Lens of Engeström (1987) Activity Theory. In Postgraduate Research Showcase (2017), University of Warwick, United Kingdom.
3. Understanding Blended Language Learning through the Lens of Engeström (1987) Activity Theory. In 5th CES Interdisciplinary Postgraduate Conference: 'Education in a Changing World' (CESPG, 2017), University of Warwick, United Kingdom.
4. Understanding Blended Language Learning through the Lens of Engeström (1987) Activity Theory in the 20th Warwick International Conference in Applied Linguistics (WICAL, 2017). University of Warwick, United Kingdom.
5. Blended Language Learning: A Case Study in a Malaysian Public University. In STORIES Conference: Technology Matters (2018). University of Oxford, United Kingdom.
6. A Cultural-historical Activity Theory Analysis of Blended Language Learning at Tertiary Level Context: A case study. In CES 6th Interdisciplinary Postgraduate Conference: 'Education in Unequal Societies' (CESPG, 2018), University of Warwick, United Kingdom.
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Abstract

This study investigates the use of blended language learning in English Proficiency (EP) courses for higher education students in one university in Malaysia. The programme being researched is a 14-week EP course at four different levels aimed at undergraduate students.

This single case study set out to evaluate the use of MyGuru in particular and blended learning in general. A mixed methods design was used, involving a triangulation of surveys, interviews and observations. Three hundred questionnaires were administered to students from the six intermediate classes and sixteen questionnaires to language teachers. A total of 24 interviews were conducted with fifteen students, seven teachers, and two MyGuru support officers. Meanwhile nine observations were undertaken in two classrooms: five observations of EP3 courses and four observations of EP4.

Data obtained from the triangulated methods were then presented using an activity theory framework. The key findings of this study were modelled in three ways: foundational, sporadic and expansive. The foundational activity model shows regular use of MyGuru particularly for information presentation and giving. The sporadic model exhibits irregular use of MyGuru with an opportunity to upload notes and documents in typical formats (word and pdf). The expansive model illustrates frequent use of MyGuru with an attempt to break through the constraints of the first two models through a deeper engagement with communicative and collaborative opportunities. The foundational model was the most typical patterned activity in this study and in the literature.

The use of MyGuru proved to have a positive impact on students' learning and it is recommended that teachers and leaders should look to work towards a more expansive approach to using MyGuru i.e. one that goes beyond presenting information and providing multiple choice quizzes. To do this course leaders should revamp the curriculum by providing assessments directed towards communication and collaboration. At a wider level training and support are needed.

Chapter 1: Introduction

This thesis is about the use of Blended Learning (BL) in English Proficiency courses in higher education in Malaysia through the lens of Cultural-historical Activity Theory developed by Engeström (1987). Chapter one starts with:

- overview of the thesis
- overview of BL in English as a Second Language (ESL)
- background of the study
- research questions
- personal significance of the study

Overview of the Thesis

The thesis is divided into eight chapters. Chapter 1 looks at the introduction to BL in Malaysian education. The contribution of BL to English language teaching at the tertiary level is discussed, and the challenges of BL implementation in the English proficiency classroom are covered. The role of English in Malaysia and in Malaysian higher education, the reality of technology adoption are also covered. Following this, the research questions and personal significance of the study are set out.

Chapter 2 provides a review of the 'Western' and 'Eastern' literature related to technology, BL terminologies, BL models, BL with VLEs and the rationales for BL adoption are discussed. Several issues around BL encouragers and discouragers are also reviewed. Then, several studies on BL in ESL context in Malaysia are presented and reviewed. The use of theories in educational technology is briefly discussed. Cultural-historical activity theory is chosen to theorise this study with its criticism puts forward for discussion.

Chapter 3 continues by looking at the research design of the study. A single case study embedded with two designs was employed. Methods are discussed in terms of participants (demographic information, process of selecting participants); data sources (tools for measuring the variables, survey tool development, validity and reliability); data collection (means used to gather data); data analysis (techniques and tools used for

analysing data); and ethical considerations (process of asking permission and some raised issues).

Chapter 4, 5 and 6 go on to report the findings. Quantitative data in the survey are presented descriptively in table formats based on CHAT framework. Qualitative data from the observations are reported using observation schedules whilst the interviews are analysed using thematic analysis and organised around CHAT as well.

Chapter 7 provides the triangulated and reduced findings from both quantitative and qualitative data. These are also discussed based on CHAT elements: tool, subject, objects, rules, community, division of labour and outcomes. Three models derived from the CHAT framework are introduced and discussed.

Finally, chapter 8 sets out the implications of the study findings both for practice and for future research. The chapter ends with a summary of all chapters, the recommendations, values and limitations of the study.

Introduction

Blended learning (BL) is a term used to describe a combination of learning environments, typically classroom or face-to-face (f2f) teaching and distance or online learning. The term may be new to some, but not the basic concept.

Students have always been asked to study at home and bring their experiences to the classroom. In the 21st century, technology seems to have triggered changes in the relationship between in and out of school learning and what is more, a popular discourse about the changes that students bring to the classroom. This is best exemplified in talk of the digital native, generation X and generation Y. The core principles of BL approach seem centred on collaborative learning, student-centred, and more inclusive processes. In particular, many have argued acknowledged that BL has the capacity to allow students more control over their learning in terms of time, place, path as well as the pace of learning within a more personalised environment (Staker & Horn, 2012).

BL has been used in many different contexts and subjects. This study concerns BL in language teaching and learning. English language learning and teaching, in particular, has been and will always be influenced by technological innovation.

In Malaysia, English has been taught since the 1960s (Omar, 1992), starting from primary up to secondary school. At the university level, English has become compulsory for every prospective student before pursuing at their selected Higher Education Institutions (Malaysian Examination Councils, 2006). Many Malaysian ESL students, however, demonstrate low proficiency in English, and many find it a struggle to reach proficiency. In order to address these shortcomings, multiple learning strategies and policies have been introduced. The education sector has been asked to change from the traditional presentational teaching to a mixture of online learning with presentational classes, or also known as BL approach. BL is believed to improve learning conditions for teachers and create new career opportunities for many people in academia. From the students' perspective, they experience a more personalised and tech-rich learning environment.

In my study, BL refers to blended learning- a mix of online and f2f settings. In the particular context of my thesis, BL is referring to the integration of a virtual learning platform, MyGuru and f2f settings in the EP courses. MyGuru is an e-learning management system, used for sharing learning resources such as presentations, lesson materials, handouts, audio-visuals, e-books or other Internet resources, for example, external links (more about MyGuru in Chapter 3). When the term BL used, it refers to the integration of both modes. MyGuru is the main tool employed in my study, thus more focus will be given to MyGuru and this can be found in Chapter 3 onwards.

Background of the Study

This study of BL implementation took place in the context of English as a second language (ESL) teaching and learning in a public university in Malaysia. The study aims to unravel the opportunities and challenges of a BL system in English Proficiency courses through the lens of Engeström (1987) Cultural-historical Activity Theory (CHAT). Many previous studies have looked at BL, how it affects ones' preferences, attitudes and motivation in general. However, to date, I have not found a study from the CHAT perspective of BL in English Proficiency courses.

My study is a single case study embedded within two different English Proficiency levels at one of the public universities in Malaysia and hereafter I will address as the university. In Malaysia, access to ICT is no longer a problem for teachers, yet many still feel that they lack the necessary skills to fully utilise ICT (Ngah & Masood, 2006). Previous studies have found that BL adoption among Malaysian academics has been very low (Haron et al., 2012), despite its promotion by the government. These findings should not be taken lightly. This study might shed some light and potential applications for technology adoption.

In 1957, Malaysia was declared an independent country. Since then, many sectors have gone through massive changes including the education sector. Endless efforts to improve the quality of its education system have been taken with the hope to benefit its people by developing students' potential and improving their academic excellence. Vision 2020 was introduced by the 4th Prime Minister, Mahathir Mohamad, and has included education and technology development on its agenda.

Vision 2020 sought to put the Malaysian education system on par with developed countries. In achieving the vision, three main policies for the implementation of information and communications technologies (ICT) in the Malaysian education sector have been introduced. These policies were formulated by the Ministry of Education in Malaysia. Firstly, ICT was seen as a tool to reduce the digital gap between schools. Secondly, ICT was seen as a teaching and learning tool, as part of a subject and as a subject itself. Finally, ICT was expected to increase productivity, efficiency and effectiveness of the management system. Some of the major initiatives undertaken by the government to promote ICT in the education system were the introduction of Malaysia Smart Schools, providing support for internet connectivity, setting up of ICT training, equipping computers in school programme, promoting electronic books to schools as well as Penang E-learning Community Project (SIPI). Apart from the government's effort, further initiatives taken by the non-governmental agencies were the implementation of Chinese and private Smart Schools.

Moving on from schools, the Malaysian Ministry of Higher Education has shown a similar desire to adopt ICT. Many Higher Education Institutions (HEIs) in the country started to develop a strategic plan for implementing an electronic university (Maznah, 2004). The plan includes teaching and learning through online or web-based modes to

replace common classroom environment. Most HEIs have sufficient e-learning infrastructure to support online learning under the government 9th Malaysia Plan (2006-2010).

A long-term plan that is known as National Education Blueprint 2013-2025 was established to further strengthen Vision 2020. Higher institutions have sought to integrate ICT into their lesson delivery (Lee et al., 2010) and out of classroom learning. A combination of both f2f and online setting has been promoted, offering a new paradigm of BL. The purpose of encapsulating BL is to enrich the quality of instructions in the f2f classroom with online learning elements for the benefits of students and teachers.

BL models have been included in the Malaysia Education Blueprint, Wave 1 (2013-2015). However, as we are approaching 2020, the vision seems so close yet so far away. Malaysia, unfortunately is still one step behind in comparison to other developed countries when it comes to the implementation of BL (Maznah, 2004).

In Malaysia, BL attracted noticeable interest and support (Mohamed Amin Embi, 2011). BL has been promoted by the government, and systems such as Moodle, eLMS, MOOCS, have been introduced. Most institutions in tertiary education acknowledge the merits of using BL and see it as meeting the needs of diverse students as well as to assist teaching and learning process (Embi, 2011; Ling et al., 2010).

From time to time, research studies have investigated the impact of new technologies and some of the constraints and limitations, as well as the benefits and advantages, have been identified (Fadde & Vu, 2014). Researchers in Malaysia have argued that BL increases accessibility of learning materials, reduces class time, allows more interesting lesson, creates a student-centred learning environment, enables flexible time and location for learning (Haron et al., 2012; Lim, 2010; Mohamad et al., 2007; Siew-Eng & Muuk 2015; Siew et al., 2012; Thang et al., 2013; Wai & Seng 2013).

The Role of English in Malaysia and Malaysian Higher Education

Another important background to this study is the role of English in Malaysia and Malaysian Higher Education. English is prevalent in almost every aspect of Malaysians' daily life, from trading business to writing jingles for commercials. Apart from its role

in binding the multiracial and multicultural nation, English is also widely used to access information in science and technology.

Malaysians are introduced to the English language as early as 5 to 6 years old. English is continued to be taught as one of the compulsory national curricula subjects during primary education (6 to 12 years old), secondary school (13-17 years old) even post-secondary and tertiary levels of education (18 years and above). On average, a Malaysian adult has learned English for 14 to 15 years. English Proficiency courses are introduced as a compulsory subject at the University in Malaysia. These courses go under different names, but all have one similar intention, which is to enable the fluent use of English among Malaysians.

Although English has been made compulsory in the education policy, passing the subject is not compulsory when completing education at the primary or secondary levels. However, English language was noted as an important Second Language (English as a second language) in the Education Ordinance since 1957 (after Malaya gained its independency status) and reaffirmed in the Education Act (GoM 1961 & 1996) as well as the National Policy in 1970 (MoE, 2012).

Although Malaysians are taught English from a tender age, that does not guarantee language acquisition competency. It was reported that fewer than 50 per cent of students who completed primary education at 12 years old and have achieved the national standard of English language (EPU 2016, p.10). The same scenario was evident in the higher education system where Malaysian graduates had difficulties in finding employment due to low proficiency in English (Singh & Singh, 2008). Melor & Rashidah's (2011) study also reported the falling levels of English language proficiency among Malaysians including those in tertiary education.

Gaps in English Proficiency situations were seen as a threat to the country's aspiration to be fully developed and economically competitive in 2020. In addressing English language proficiency problems, the Ministry of Education and the Government of Malaysia have sometimes seen technology as a panacea. The Ministry of Education adopted the SMART School approach (Mirzajani et al., 2016, p.12) and the integration of technology with subject content has generated positive feedback in teaching and learning English the SMART way (Azizah et al., 2005).

To date, the integration of online learning and f2f classroom meeting is seen as another strategy that could engage students in enhancing and extending learning beyond the f2f classroom alone. In a blended approach, classroom contact hours are still intact (Dziuban et al., 2004); but students have extra opportunities to gain a deeper understanding (Chen & Jones, 2007) and to engage in cooperative activities beyond the classrooms setting (Yuen, 2010).

However, despite the encouragement given to BL, many university teachers have been baffled as to how they can utilise BL as a part of their teaching and learning repertoire. Therefore, this study is an attempt to explore the problems of implementation in order to inform relevant stakeholders.

The Reality of Technology Adoption

In higher education, a growing body of literature on BL has been documented (e.g. see Garrison & Kanuka, 2004; Graham, 2006 and for a full breakdown see the literature in Chapter 2). However, a key idea throughout the literature has been the idea of merging the best of both worlds: f2f and online. As with all introduction of new technology, those arguing for BL have produced fairly romantic narratives about the possibilities of transforming education. BL is seen as a extending the reach of distance students, optimising learning development (Singh, 2003). However, the role of technology in language learning has never been straightforward. Many language practitioners are still struggling to fully incorporate technology, particularly computer-based technology, into their teaching practice, professional development, institutional leadership and curriculum design (Motteram, 2013). One of the reasons for partial take up is insufficient pedagogical and technological knowledge that includes orientation, mentorship and established policies (Ali et al., 2004) and lack of practical experience to plan and implement the use of new technology.

In Malaysia, the Ministry of Education identified one of the factors that contributed to the low uptake of technology-based learning as poor interface design (Kamariah, 2006; Kamaruddin, 2010; MDC, 2005; MOE, 2004; Neo, 2005). On top of that, there were technical problems with hardware and software. The time factor, limited computer literacy; lack of instructional design resulted in irrelevant content; technical malfunctions; inefficient ICT infrastructure and insufficient hardware were all factors

that led teachers to avoid using the technology in their teaching (Azizah et al., 2005; Mirzajani et al., 2016; Selvaraj, 2010).

BL today has been introduced without a clear understanding of its underlying philosophy. It is not simply about g the element of online learning or materials. Instead, it requires a deeper understanding of its educational theory or at least this is what its supporters proposed. The blending of technology in language learning specifically can be complex because it requires both elements of external and internal drivers (Oxford & Jung, 2007) including technology accessibility, course structure delivery, teacher acceptance and readiness, to name a few. The successful integration of this technology demands commitment in time, development of competence, appropriate design, and experiences of teaching as well as reflection on teaching (Moser, 2007).

To date, many research studies of BL focus on the perceptions and attitudes of students and teachers as well as the effectiveness of its use of testing and evaluation across multidisciplinary courses. Most existing studies have focused more on learning outcomes rather than the processes. The studies provided a limited perspective and did not identify the root of the problem. Very little work has focused holistically on the opportunities and obstacles of ICT incorporation and this is where CHAT comes in.

Engeström (1987)'s cultural-historical activity theory was used as an analytical framework in this study to investigate BL courses of English Proficiency in Malaysia. There are not many theories that could provide a more rounded framework to explore learning changes, activity theory seems to offer one way of looking at innovation more holistically. CHAT offers a way of capturing dynamic relationships among users, technology and the outcome for educational technology integration. CHAT typically involves a consideration of object, division of labour, subject, mediated tools, community and rules. It has been used to look at technology integration activity based on the view that what people think and feel is entangled with what people do (see Daniels et al., 2010; Kaptelinin & Nardi, 2006; and Roth & Lee, 2007).

This study focuses on human interaction and the relationship between technology innovation and human activity in a system. What makes a BL system work in a broader perspective? It contributes a relatable case study for other researchers.

Research Questions of the Study

The study aims to investigate the use of BL within the CHAT framework. It is asking how does CHAT help us understand the way that BL is used in a higher education institution? This involves addressing specific questions framed around the seven elements of CHAT:

a. Tool: What does the tool enable regarding teaching and learning?
b. Subject: What are the personal and attitudinal characteristics of the subjects?
c. Object: What do subjects want/ are expected to achieve in their roles?
d. Rules: What expectations are there surround teaching and learning and the use of the tool?
e. Division of labour: What are the roles and relationships of the subjects?
f. Community: How does the community help the subjects in achieving their objects?
g. Outcomes: What are the different kinds of outcomes in the activity system?

This study is important because it offers a case study in a Malaysian context and addresses a gap in an under-reported area. Secondly, this study also addresses gaps in blended learning studies looking at English Proficiency context. Finally, this study also provides an in-depth exploration of CHAT resulting in a new understanding of BL adoption.

Personal Significance of the Study / Motivation

I began this study as a technology enthusiast and as a practitioner in education. I first started teaching when I was in the final year of my undergraduate study. I had an opportunity to join the undergraduate working scheme and was given a chance to teach multimedia subjects such as Adobe Photoshop, Adobe Flash and some basic coding courses. During that time, I was a TESL student, whose love and passion had revolved around English language learning. Ever since I started teaching, I intrigued by how I could make my lessons more interesting by making use of the technology. Throughout the process, I sometimes stumbled upon problems not only in terms of the teaching pedagogy but also in regard to the technology that I had been relying on for my

teaching. Being inquisitive led me to think about technology in development of teaching and learning.

When problems related to the use of technology occurred during my teaching, or my ability to make my teaching more interesting, I often wondered what the roots and causes to such predicaments were. Very often I found myself blaming an individual or entity instead of trying to understand the system as a whole. Everything turned into somebody's fault. My inability to see problems from a macro perspective had led me to adopt CHAT in this study, due to its nature in offering a holistic view of a system. CHAT also enabled me to take a step back, and to see the system in a wider way, thus helped me understand why some people behaved in certain ways within a wider context.

I was so eager about using MyGuru when I first started teaching in the university, but the low percentage adoption of its use often disappointed me. I was curious as to why MyGuru had not been used at the least, to meet certain expectations that were set by the university. This is what has driven me to do this study so that I will not only understand the system holistically but also give the community something back.

Getting the opportunity to further my studies abroad and under the supervision of my supervisor who is one of the experts in this field of the area, finally made my dreams come true. My hope was that at the end of this study I was able to gain a detailed picture of how BL system works and accentuate possible emerging of a new set of teaching practices that could be relevant for implementation in the future.

I now turn to Chapter 2 which talks about the literature review with the focus on BL approach and also some overviews of CHAT in particular.

Chapter 2: Literature Review

Chapter two is divided into five sections:

- Western and Eastern literature
- visions of technology
- blended learning terms, models, VLEs, and rationales
- encouragers and discourages for developing educational technology
- theories in educational research

Introduction

This thesis raises questions about technology and what it does and how and why it is used. The thesis begins with a review of past efforts to use technology and reflect on its use in language teaching. I accessed the literature from different sources but mostly using online journals. My focus has been on BL in general, both in developed and developing educational systems. I gathered literature from Australia, Britain, America, Singapore, Malaysia and other countries as well.

Institutions have been looking for solutions to improve teaching and learning through BL and most of them encounter similar difficulties. Of course, this issue plays out differently in different context and it is important that I do not report on case studies in Britain or America alone. BL is a growing field of research and there is a lot of early reporting. There is a small but observable amount of field research in Malaysia often based on unpublished theses and proceedings and faculty advice in universities.

For the most part, I am looking at the higher education context where there have been examples in schools illuminating some issues that I have cited these. My review evolved over time. I carefully took notes on everything I read, noted the authors, the context of the research and the methods employed. I made notes of the key findings particularly in regard to positive outcomes of BL, difficulties and limitations, but also what encouraged take up and what discouraged take up. After having looked at case studies, I looked at examples of theoretical framing and this led me to look at Technology Acceptance Model (TAM), Community of Practice (CoP), Three Zones Framework and Cultural-historical Activity Theory (CHAT).

This chapter is organised around: the vision of technology; the terminologies of BL; the models; BL in virtual learning environment (VLE); rationales for BL adoption; the encouragers and discouragers for developing educational technology; BL innovations in Malaysia; and theories in educational research.

Visions of Technology

Technology has changed the way people communicate. Living in the digital age has created opportunities for bridging physical distance in respect to social contact, global and local impact on economic, socio-cultural and political structures (Papacharissi, 2010). Digital archives allow wider access to archival materials, interactive multimedia allows for more engaging participation, and expanded social networks allow ubiquitous reach. The proliferation of ICT in education has sparked considerable interest among scholars as well as institution leaders and stakeholders. For some people, technology has made our communication more superficial thus threatening our relationships. However, others perceive digital media as a flexible, powerful tool so that we can benefit from establishing stronger bonds and connections. Offline and online spheres of social contact, for instance, are facilitated by multimedia platforms in ways that have positive effects on social capital (Bauernschuster, Falck, & Woessmann, 2011; Ellison, Steinfeld, & Lampe, 2007; Hampton & Wellman, 2003; Papacharissi, 2010).

Technology enthusiasts see technology as appealing to young people in positive ways (Prensky, 2001); enhancing support for content area learning (Kinzer & Leu, 1997); improving reading comprehension; increasing language acquisition (Zhao, 2005); enhancing test scores (Abdul Rahman, 2018; Boster & Staff, 2004; Rajaretnam, 2004); boosting motivation (Granito & Chernobilsky, 2012); as well as self-esteem in the context of exposure to Facebook (Gonzales & Hancock, 2011). Regarding BL in language teaching and learning, technology appears to allow students to have control over their learning regarding time, place, path as well as the pace of learning within a more personalised and conducive learning environment (Staker & Horn, 2012). More pragmatically, technology may support conventional teaching methods e.g. by providing more interactive presentations such as interactive whiteboards, PowerPoint lecture notes and other interactive learning software.

However, this enthusiasm for technology has been contested. From a pessimistic view, technology is being forced upon education and very often disrupts teaching unnecessarily, resulting in learning erosion (Coates et al., 2005; Hirschheim, 2005; Noble, 1998). In practice, the process of transforming education through the use of technologies rely on the replication and reinforcement of teacher-led and didactic practices (Blin & Munro, 2008; Eynon, 2008; Kirkwood, 2014). Furthermore, some countries and some students are technologically ill-equipped to capitalise on technology adoption fully.

ICT is assumed to be fit for replication, but in practice, local difficulties mediate its use. Selwyn (2011) claims that educational technology often suffers from a top down managerial discourse dominated by efficiency. Furthermore, he also asserts that 'technical fixes will only deal with the surface manifestations of a problem and not its roots' (p.33). Teaching and learning need to be tackled from a social issue perspective, not a technical one. He concludes that there are many claims about ICT based on suppositions, personal beliefs, opinions and conjectures. Technology is seen as enhancing learning yet there is very little evidence of that. Thus, more conclusive evidence is needed.

The impact of technology is not in doubt, but we must resist a technological determinist agenda, one of utopian pronouncements and the industry of scenario building. Selwyn (2014) suggests that there is a 'gulf that persists between the rhetoric of how digital technologies could be used in education and the realities of how digital technologies are actually used in education' (p.7). He appeals against the disappointingly simplistic claims that technology enthusiasts put forward.

For example, Siemens (2005) argued that constructivist MOOCs needed a new theory of learning, connectivism based on technological principles. This gives us a new paradigm but is it really new and justifiable? Connectivism goes from describing what is happening to making claims about should be happening. Siemens claims that learning happens based on the fact that people connect together. However, his statement deserves a critical response. Just because people do connect with one another, does not mean learning is taking place. Connecting people does not necessarily lead to robust, valid, or professionally relevant and useful knowledge.

Again, Prensky (2001) put forward the idea of digital nativism. Whatever criticisms are thrown up at Prensky (2001), his work does alert us to changes in habits of young people connected with technology advancement (see also Boukadi 2014, p.2; Mahrooqi & Troudi, 2014). But, in reality, we are not defined by our demographic in the way Prensky suggested. There is no significant difference with respect to ICT competency between the two generations of ages as conducted by Guo et al., (2008). The terms of 'digital natives' and 'digital immigrants' that was intended to show digital divide do not seem to work. In fact, diagnosing nativism has created a misleading perspective and distracted researchers from a more careful consideration of the diversity of ICT users and the nuances of their ICT competencies.

The innovation-driven enthusiast comes up against harsh reality, the outcomes of innovations are not always as what we imagine theoretically. The technology innovation that we have today perhaps could provide enhancement in teaching and learning quality, but, it is far from achieving transformation in education (Laurillard 2007). With too much enthusiasm, we tend to overlook the limitations and constraints.

Rather than overoptimistic accounts of technology, what we need is a finer grain analysis of what technology offers. For example, Baym (2010) understands digital media in a more nuanced means. She sees seven features of technology consisting of interactivity; temporal structure; social cues; storage; replicability; reach; and mobility. Each is varied in scope. For example, interactivity, can encompass three different meanings: social interactivity; technical interactivity; and textual interactivity. These features of technology enable users to achieve certain ends. For example, with storage, messages could be stored and sent to audiences locally or globally and users are allowed to access more information than ever before. Technology connects people and they can communicate at any time and place, which is a huge shift. These are some of the consequences of certain technology features of particular software and not the consequences of using technology in general.

Technology has connected people via new forms of social networks such as Facebook, LinkedIn, Academia, to name a few. Many studies have been conducted on the impact of social media to support teaching and learning. One of the examples is using electronic voting systems to increase engagement in the teaching of engineering Mathematics at the university by (Goodband et al., 2011). In his study, he explored the

use of such a system to increase student engagement. Well-planned innovation seems to give students access to allow them to constructive feedback and participate actively in the social context (Maloney 2007; Selwyn & Grant 2009); and at the same time fostering greater communication and collaboration in online learning Harasim (2000). With these attributes, students can be helped in their conceptual understanding.

Many interactive social networking sites (SNSs) allow asynchronous response and feedback (Looy, 2016) and provide powerful affordances to connect and interact with other people (Doleck & Lajoie 2018). By building their own virtual communities through SNSs, learners can share ideas on the platform (Karpinski et al., 2013), thus giving students time to carefully construct their thoughts before writing any post (Baruah, 2012; Meloni, 2010; Stanciu et al., 2012). Furthermore, more space for socialisation and 'togetherness' could also enhance the quality of learning (Delfino et al., 2007) and promote effective teamwork (Ekblaw, 2016; Saghafian & O'Neill, 2017). Students can have control over space and time (Cheng 2016; Sorgenfrei et al., 2013)

What we can conclude is that our ideas about technology can be distorted by technology enthusiasts and pessimists. We need to look closely what technology offers rather than what ICT offers in general and be aware of the idea that these technologies work differently under different circumstances and contexts.

Blending Learning: Terms; Models; VLEs; Rationales

Blended Learning Terms

BL was first coined in the late 1990s. Initially, the term was used interchangeably with 'hybrid learning', 'technology-mediated instruction', and 'mixed-mode instruction'. Originally, the term BL was used in the business world and corporate training (Sharma & Barret 2007), and after that, it was came into higher education (Macdonald 2006) and later followed in the field of English language and teaching. A firm consensus on a definition of BL has not been reached despite its widespread use (Whittaker 2013). However, Bonk and Graham (2006) are widely referenced and they talk of an ongoing convergence of two archetypal learning environments: f2f and online. One way of making sense about convergence is time spent in different environment and Smith & Kurthen, (2007) came out with a taxonomy in terms of the balance between physical and online teaching (see Table 1).

Table 1: Taxonomy of Terms Related to BL (amended from Smith & Kurthen, 2007)

Term	Definition
Web-enhanced	Courses that make use of a minimal amount of online materials, such as posting a syllabus and course announcements.
Blended	Courses that utilise some significant online activities n otherwise f2f learning, but less than 45 per cent.
Hybrid	Courses in which online activities replace 45 to 80 per cent of f2f class meetings.
Fully online	Courses in which 80 per cent or more of learning materials are conducted online.

Allen and Seaman (2010) offered a slightly modified view. BL courses had between 30 per cent to 79 per cent of content delivered online. 80 per cent and above online content was categorised as online, 1 to 29 per cent online content was categorised as web-facilitated. However, these definitions place emphasis on the balance of time in f2f an online environment rather than on the pedagogical mix. No teaching and learning aims are inherent in these definitions. The time-based blended learning, however, does not always meet students' needs (Jones, 2017). Hence, a step in this direction is offered in Horn and Staker (2011) in their blended learning matrix.

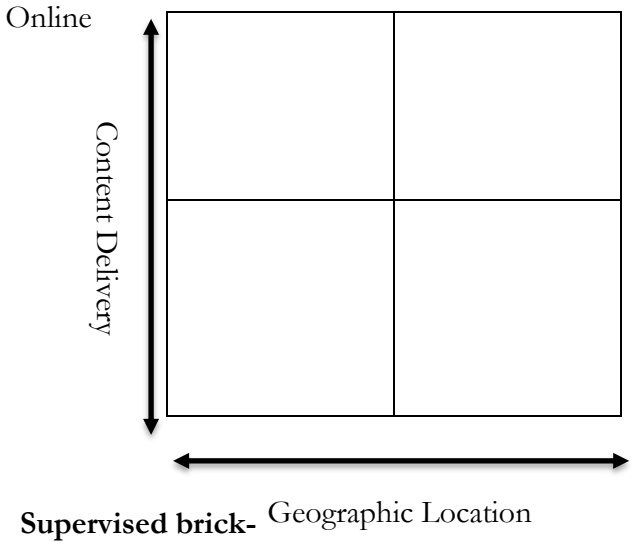

Figure 1 Blended Learning Matrix (Horn and Staker, 2011, p.6)

Horn & Staker (2011) illustrate the definition of blended learning in a two-dimensional matrix (see Figure 1). They defined BL as "any time a student learns at least in part at a supervised brick-and-mortar location away from home and at least in part through the Internet with some element of student control over time, place and/or pace" (p.5). This definition combines the pedagogical element (supervised brick-and-mortar vs remote)

and setting (offline vs online). In the quadrant Figure 1 anything that falls within the four squares can be considered as blended but each to different degrees of integration and setting.

Osguthorpe and Graham (2003) see blended learning in more pedagogical terms and suggest BL requires a 'unified' pedagogical approach. Garrison and Kanuka (2004) also define BL as the incorporation of f2f and online learning experiences whereby both approaches provide 'equivalent' learning opportunities for all, especially those who have difficulties in attending the f2f mode. However, when looking at this from another angle, being unified and equivalent do not necessarily mean mirroring the exact lessons in f2f or in online settings. A coherent pedagogical approach seems more appealing rather than 'unified'.

In extending Graham's (2006) definition, Garrison and Vaughan (2007) drew attention to what a BL environment supports. They noted some things were easier to do online than f2f. For example, the online element put more emphasis on the use of text-based material as compared to the oral delivery in a typical classroom. Their understanding was consistent with Graham's (2006) BL concept. Stacey and Gerbic make a similar point regarding use of text online and note a BL approach could fall between fully online and f2f.

In looking at integration of online and f2f, many writers note that BL lies on a continuum and that there should be less attention paid to the percentage of time spend in one environment than the other and more on pedagogical (Hew & Chang, 2011; Mortera-Gutiérrez, 2006; Watson, 2008; Jones et al., 2009). In spite of the lack of consensus on the definition of BL, Garrison and Kanuka (2004) believe that BL should offer learning experiences customed to the needs of a dynamic, knowledge driven society (Garrison & Kanuka, 2004).

Blended Learning Models

In an attempt to flesh out the idea of blended learning, O'Connel (2016) identified seven blended learning models which offered various levels of integration: blended f2f class; blended online class; the flipped classroom; the rotation; the self-blend; the blended MOOC; and flexible mode courses. These models are not comprehensive, new models evolve from time to time (O'Connell, 2016). These are summarised below:

- The blended f2f class is where online activities are carried out within the classroom i.e. students are given time to access resources, try quizzes or other tasks. Higher-order learning activities such as discussions and group projects are continued in the class.
- The blended online class is the reverse version of blended f2f class. Most activities are conducted online including the discussions and group projects, although There are times that students are needed to be in the class to attend activities such as lectures or labs.
- The flipped classroom, which is among the common model employed. Students listen to lectures or access to online resources and used scarce f2f time for higher order activity such as discussion and debate.
- The rotation models allow students to switch between f2f and online learning in the context of the school. Some other time in the classroom engaging in f2f lesson. At other time, students may leave a classroom where there is a lab, or digital library or digital technologies, do some online work and come back for f2f session later.
- The self-blended model is where students enrol on a course and at the same time enrol for an online course on a similar topic e.g. an open access MOOC. As the name saying, self-blend is totally up to the individual without any direction by the faculty members.
- The blended MOOC resembles a form of flipped classroom using f2f class meeting in addition to the MOOC platform. Students access MOOC out of classroom hours and use the f2f meeting for additional problem-solving activity.
- The flexible blended model is a course or subject in which online learning is the backbone of student learning, even if it directs students to offline activities at time. Greater flexibility is offered to students to move on fluid schedules among learning activities based on their needs. This model gives students higher degree of control over their learning, and teachers will only facilitate when required.

Blending Learning with VLEs

BL can be supported by different technologies, not necessarily by online delivery. Early BL was supported by CD-ROMs with library of learning materials, DVDs with the same materials plus multimedia. In looking for online platforms, BL can be supported quite simply using SNSs or simple discussion forums. As seen above, MOOCs can be integrated into a flexible blend of online and offline working particularly where students have themselves identified the MOOC.

Much recent talk on BL has focused on the combination of f2f with Virtual Learning Environment (VLE) or Learning Management System (LMS) and indeed there is a large overlap between the literature on BL and on VLEs. This is reflected in my thesis too but for the sake of clarity here, the idea of VLE is explained in more detail. Note however that similar sets of tools within a VLE have also been described as learning platforms, managed learning environment and simply 'portals'. Hammond found that a VLE (or learning platform) should:

- Provide access to learning materials (e.g. files, web pages capable of multimedia formats) and signposting to the material through menus, bulletins, overviews, and, in learning activity management systems (LAMs), detailed curriculum mapping
- Contain opportunities for communication and collaboration between learners and between tutor/teacher and learners (both synchronous and asynchronous) again capable of different media and including student generated content e.g. Wikis, web pages
- Contain opportunities for assessment and assessment management, tracking of result and progress through, e.g., online testing, posting of assignments, formative and summative feedback on assignments with teacher control over the system and differential rights to data
- Offer provisionality e.g. all data is amendable
- Be Web browser based but password protected, again with differential rights of access
- Be integrated so that there is a consistency between the different parts (Hammond, 2010: 5-6).

Hammond (2010) shows that there was a great deal of interest in UK schools and in some higher education institutions in providing a mix and match approach to 'learning platforms', for example specially designed communication software allied to generic web pages plus bespoke assessment systems. However, over time commercially provided and supported systems such as Blackboard and WebCT tended to dominate. These offer a single platform which provide all the required functionality. They benefit from ease of use but can limit access to better designed specialist tools. Further they can lock the institution into a particular software provider. In my thesis the approach was to develop an institutional platform, rather than a commercial provided one, My Guru, which essentially looked like a VLE.

There is a lot of literature around VLE use in Higher Education much of which has been cited in respect to BL. Recent experiences of VLEs are further reported in (Alves et al., 2017; Han and Ellis, 2019; Halverson & Graham, 2019; Philipsen, et al., 2019; Vanslambrouck et al., 2019; Zilka et al., 2019)

Looking at the literature it can be seen that, as expected, the value of VLEs seem to match closely to the literature on blended learning. Through VLE use student can *access* information quickly and easily (Bettencourt, 2014; Gowan, 2018; O'Connel, 2016) ; they can collaborate with each other (Delfino et al., 2007; Garrison and Kanuka, 2004; Hammond, 2010); they can communicate with each other and with staff and they can get feedback on their learning through tests and communication. Students can automatically be graded via the VLE assessment feature which helps students to reflect their own performance and teachers to identify and analyse students' learning patterns. In general terms, they can expand learning – for example by accessing resources not otherwise available – and extend learning from the classroom to the home. VLEs can also offer greater personalisation of learning for example teachers can create recommended learning paths based on students' needs so that students who have mastered particular content can proceed to the next levels whilst those who have not, can go through a remedial process. Finally, VLEs offer efficiency gains for example they enable the sharing of resources among teaching teams and the repurposing of resourcing, for example amending presentations for different audiences. Administratively, they allow easy access to relevant records and just in time access to

data, for example immediate identification of those who have not submitted an assignment.

The literature also highlights a series of constraints on VLE use and again these match to the issues highlighted earlier in regard to ICT in general and to blending learning. These issues include access to training and support (Al-Shahrani, 2010; Becta, 2004; Veen & Vanfossen, 1999); teachers' attitudes and motivation towards technology (Al-Ghamdi, 2015; Atkins & Vasu, 2000; Al-Shmrany & Wilkinson, 2014); and technology skills and affordances (Ertmer, 1999; Ertmer & Ottenbreit-Leftwich, 2014; Koehler & Mishra, 2009).

Some studies found that some higher education institutions have better support and training for VLE use (Younie & Leask, 2013) as compared to schools. This reflects the greater size of such institutions (allowing for dedicated IT support teams) and as Passey and Higgins (2011, p. 329), a longer history of VLE use.

A key issue in VLE use is how to go beyond information exchange and onto collaboration and knowledge building. Here Salmon (2000) proposed five-step model to teach using VLEs covering:

i) Access and Motivation- e-moderators welcome and encourage participants to interact,
ii) Online Socialisation – familiarising and providing bridges between cultural, social and learning environments,
iii) Information Exchange – facilitating tasks and supporting the use of learning materials
iv) Knowledge Construction via scaffolding – facilitating process
v) Development of higher-level skills and behaviours- supporting and responding

Preston (2008) then expanded the stages into the sixth step which she called as vi) Braided Learning which was based on communal constructivism proposed by Leask, Holmes and Younie (1995). In this step, learning develops through the online platform as from discussion among practitioners. New knowledge is built on the exchange of information within the community.

In summary, BL can be defined as an attempt to mix f2f and technology. There are different ways this can be carried out. BL initiatives can fall within a continuum of place (online and offline); time spent (balanced or one modality favoured); level of integration (a coherent mix or ad hoc). Researchers have come up with different models to describe BL and have noted the use of different technologies.

Rationales for blended learning

The rationales for BL are greater personalisation; extending the classroom; interaction; assessment; and access to information.

BL enables personalisation so that teachers can cater students' diversified needs and in return, students can experience a diversity of teaching styles (Procter, 2003; Mohamed Amin Embi, 2011; Ling et al., 2010). This has made BL more appealing especially to students who have own unique learning abilities, backgrounds and preferred learning styles. Multimedia can appeal to different sensory modes (listening, reading, speaking and writing) and a variety of learning styles (Sankey et al., 2011). Teachers can custom learning support and access to learning materials based on their students' needs (Gulc, 2006). This gives students an opportunity to initiate and continue their own learning outside of classroom hours (Chen et al., 2010; Harasim, 2000; Hakkarainen et al., 2013; Lee et al., 2008) at their own pace.

BL can lead to extending the classroom so that not only can students learn at their own pace, but they can also experience ubiquitous (anytime, anywhere) learning. BL means that teachers and students choose when, what, and where to teach and extend learning beyond the supervised brick-and-mortar classroom (Copley 2007; Ng'ambi & Brown 2009; Ross and Gage, Taylor & Clark 2010; Woo et al., 2008). Students can discuss on forums, attempt quizzes, do controlled tests online.

The possibility of collaboration, communication, and sharing through a mix of online and f2f settings seems to offer opportunities for more engaging interaction (Bower, et al., 2015; Challob et al., 2016; Kemp & Grieve, 2015). Students are encouraged to participate in learning through the creation and editing of content and to work together to create new forms, concepts, ideas, mashups and services. Active interaction is promoted between students and teacher due to the interactive features of the blended

classroom as compared to the traditional frameworks of a classroom (Prohorets[a] & Plekhanova 2015; Shaidullin et al., 2014; Vaughan, 2014).

BL also provides automated assessment which can motivate certain students and help consolidate knowledge. Automated assessment practice can help students to prepare for summative tests and can help reduce teachers' workload as feedback can be delivered automatically. Online assessment allows students to identify their areas of weakness and helps teachers to keep track and analyse students' performance. Varank et al., (2014) found that students had positive experiences from using automated feedback.

Another rationale for adopting BL is improving cost effectiveness (Graham et al., 2003). Cost efficiency compromises of three different dimensions: money, time and resources. For example, teachers can save teaching time as students can access learning materials in advance and thus be better prepared. In addition to that, students can also have access to digital materials and make teaching less expensive to deliver, more affordable and time convenient (Giarla, 2018). However, some studies argue that the use of technology costs more money and time spent due to the need to buy equipment, train teachers to use technology, and in providing appropriate support. Newly established institutions in particular may need to invest a lot of money at the start, but after a time, the return on investment might be felt.

Investment needs to be long-term in the belief that students and teachers can benefit from easy access to online materials. With a lot of information available, teachers can signpost relevant materials, indicating whether they are main or supplementary. Azizan (2010) sees the combination of both online and f2f as one way of learning where teachers and students get easy and quick access to information in different forms and subject matters (see also Higgins et al., 2012).

However, for some, the use of BL in a classroom environment does not necessarily give more flexible and interactive learning experiences (So & Brush, 2008). With the incorporation of multimedia elements during an online involvement, some students might feel overwhelmed and their cognitive load levels heightened (Bower, Dalgano, Gregor, Kennedy, Lee and Kenney, 2015). Some media might be off putting those who with special needs (Bower et al., 2015).

Greenway (2013) reports that proper time and planning is needed for teachers to develop and expand their skills in developing the BL courses. Poon (2014) sees good design is important in BL which is often restricted due to time constraint. Furthermore, with lack of skills to integrate technology, makes it more difficult (Mihai & Christova, 2009).

Overall, it seems that higher retention rates can be gained through BL (Bowyer & Chambers 2017; Dinning et al., 2015; Dziuban & Moskal 2001; Regier 2014; Vaughan 2007) and better learning outcomes can be achieved (Ceylan & Kesici 2017; Isti'anah 2017; Shantakumari, 2015) as compared to f2f mode (Oweis, 2018; Zhang & Zu, 2018). What is clear is that proper time and planning is required in ensuring BL works as expected as we can see why many higher institutions wanting to adopt f2f and in the next section, I discuss the encouragers and the discouragers for integrating technology in this way.

Encouragers and Discouragers for Developing Educational Technology

Given that BL seems to offer many advantages rather than disadvantages, it is important to consider why it seems to be quite difficult for institutions and teachers to get started with BL and to ask why has not taken off. To do this, we need to look at the encouragers and discouragers and I have gathered three key ideas: access; teachers and institutions.

In developing educational technology, access is seen as one of the most important factors. In this sense, it is a causal factor, for without technology there is no BL. Even when there is technology, teachers need the basic infrastructure such as the computer, LCD projectors, internet connection to be available and fully working in their classrooms. In addition, the software should be user-friendly, and supported by specialist staff (Firmin and Genesi, 2013). Teachers need to rely on the technology and properly plan what they want to do in their lessons. With reliable technology, the amount of time and effort spent in using the VLE can be reduced (Becta, 2004a). Unreliability of the technology and doubts about its performance, for instance, making audio recording that cannot be heard during teaching in the classroom can discourage teachers to use technology.

The number of computers in institutions should be sufficient to meet students' needs in the classroom and in the institution more generally. Attention should be paid to home and out of institution access. Not all students have a computer or have access to a computer and not all have internet connections at home (Al-Ghamdi, 2015). If there is no access, there needs to be compensatory strategies e.g. learning hubs setup within institutions. Nationally, the governments might like to think about schemes to enable people from low SES to be able to purchase computers. Access to appropriate resources is another encourager for the ICT uptake (Al-Ghamdi, 2015). In the case of language teaching for example, there is a lot of available resources, however, these need to be signposted and organised coherently for learners.

Next, we consider teachers as a factor in the take up of ICT. Take up will not be possible if teachers do not have positive attitudes and beliefs about teaching and learning with technology (Hermans, 2008; Sadaf et al., 2013; Dusick, 1998). When teachers feel confident using technology, have the appropriate attitudes and are ready to accept the use of the technology in the classroom, take up is more likely (Atkins & Vasu, 2000; Al-Shmrany & Wilkinson, 2014, Bax, 2003; Becta, 2004; Lam, 2000). Positive beliefs and attitudes impact on teachers' motivation. Snoeyink & Ertmer (2001) report that teachers tend to avoid using technology when they do not believe it will make a difference. Teachers' technological competence, motivation, procrastination and loss of interest have negative impacts on the ICT uptake (Al-Ghamdi, 2015). There is an argument that teachers who have more teaching experience are more likely to adopt technology (Becker, 1995), this is far from clear. More recent research suggests that less experienced teachers may be more likely to successfully integrate technology than well-seasoned teachers due to familiarity and competency with the technology (Buabeng-Andoh, 2012; Ertmer et al., 2001; Hsu & Ping-Yin, 2013).

To develop their skills and knowledge, teachers need to have training and support. One of institutions major roles is to prepare the appropriate type of training and support for their staff. Well-designed training could help develop teachers' competency, knowledge and skills for using ICT (Fragkouli & Hammond, 2007). Lack of training discourages teachers from adopting ICT in their teaching (Al-Shahrani, 2010; Becta, 2004; Veen & Vanfossen, 1999). For example, teachers need to know the basic use of technology e.g. how to operate the projectors, how to handle the equipment in the class (Ertmer, 1999;

Ertmer & Ottenbreit-Leftwich, 2014; Koehler & Mishra, 2009). Koehler & Mishra (2009) add that not only do teachers need to know how to use the technology in theory, they also need to be well-versed in practice. Without the appropriate knowledge and skills, teachers will avoid using the technology in their teaching (Debski, 2000; Goktas et al., 2009; Lam, 2000).

Some researchers see that teachers need personalised training, but the training that is often one-size-fits all training. This could be due to many factors: cost; source; and time efficiency. A one size-fits-approach fits no one, in fact, it violates principles of effective instruction established by modern cognitive science and educational psychology (Bransford et al., 2000; Biggs, 2003; McKeachie, 2002; Ramsden, 2003). The approach that targets one type of teacher fails to address the needs of most teachers (Felder & Brent, 2005).

Next, institutions need to be committed to ICT. In fact, many institutions have invested a lot of money in upgrading their ICT facilities. For example, in the UK, JISC-UCISA's study (Joint Information Systems Committee-Universities and Colleges Information Systems Association) reported that a total of 95 percent of HE institutions used BL to deliver in and off-campus teaching (JISC, 2005). One of the key rationales for this investment was to accommodate an increased number of students including the part-time students (MacDonald, 2006). Investment in technology is also driven by surveys that show some students want to see the integration of technology element in their curriculum (Centre for Digital Education, 2012). For example, the US 93 percent of HE respondents felt satisfied with BL in teaching and 86 percent also felt that BL was prevalent in the workplace learning setting (Bonk et al., 2006).

When institutions do not provide enough resources, this presents a constraint (Al-Ghamdi, 2015; Lam, 2000; Shin & Son, 2007). For instance, institutions in developing countries might struggle with technology adoption as they may lack reliable infrastructure. Schumpeter's (1939) theory of innovation talks about the lack of opportunities for the developing countries in tapping into global know-how and technical knowledge; as shown in a recent study that show these countries invest less in innovation (Cirera and Maloney, 2017, p.2).

Within institutions, leaders should promote the use of technology and establish consistent use among academics (Al-Ghamdi, 2015). Leadership covers formal and

informal roles. Those people within roles such as departmental heads and course leaders need to model the use of technology and build IT into curriculums (schemes of work) and consider how to build technology into assessment. In distributed leadership, colleagues and peers are required to help and support each other, to share practice and develop their teaching together. Such top down and bottom up leadership are an effective encourager, while its absence is a discourager.

Encouragers and discouragers can be seen at macro-meso-micro levels. The macro level is often associated with the process of education policy, curriculum, ICT reform and cultural beliefs at national or state level. These differ from one country to another. Some countries might have a more 'restricted' policy a primary intention to promote instruction in computer literacy, whilst some might have more 'comprehensive' policies that emphasise the integration use of ICT in the curriculum. The meso level analysis, is about the problems faced at the institution or school level. Younie (2007) identifies several issues revolving around school culture which included leadership, vision, shared ethos, training and ICT infrastructure. These problems are raised by other academics across the globe too (Ali et al., 2004; Abdul Razak, 2015; Hartley, 2014; Tedla, 2012). The micro level analysis tackles individuals' perspectives such as teachers' and students' readiness to use technology in the classroom teaching.

In addition to the macro-meso-micro analysis, Ertmer (1999) and Keengwe et al., (2008) have categorised discouragers into two types: extrinsic (first order) and intrinsic (second order) discouragers. The first order barriers are considered as equipment shortage, technical support and other issues related to resources such as insufficient funds, lack of vision and planning, political factors, social, cultural, corruption and unreliability of equipment (Matthew et al., 2006; Snoeyink & Ertmer 2001; Vechten, 2013). The second order discouragers include teachers' attitudes and level of willingness to accept changes. These are categorised as intrinsic barriers (Bax, 2003). Lack of knowledge and skills, time constraint, and organisational culture are also put under the same roof as awe and fear (Khan et al., 2012).

In summary, there is a web of factors which encourage or discourage ICT use. These can be seen at the policy level, institution level, departmental level and teacher level. As a whole, good infrastructure encourages use, while unreliable infrastructure discourages its use. Teachers' readiness, positive acceptance, beliefs and attitudes encourage ICT

take up. Training is often seen as a way of encouraging use, but the training must be appropriate for teachers. Teachers need a supportive environment including leaders and community. In the next section, I present several cases of blended learning in Malaysian context.

BL Innovations in English Teaching and Learning in the HE in Malaysia

This section showcases ten studies on BL in English language teaching and learning in Malaysian contexts. I started my search by using keywords such as "blended learning in Malaysia" using google scholar, Scopus search engine and the journal search engines such as Springerlink, Elsevier, and Routledge. I then set the filter from 2012 to 2019 to see the number of existing BL studies in Malaysia. My search threw up various types of BL studies across different fields including Engineering, Mathematics, Medical, Computer Science and Business. I was quite pleased to see that BL had been starting to be taken seriously in Malaysia. Since the results were too broad, I narrowed down my search by g another important keyword, "English language learning and teaching". I was satisfied that the output had been more specific and reduced. So, I finished with ten studies conducted in higher education context only.

As seen in Table 2, I summarised the articles into five elements: study (who conducted the research); purpose (the focus of the study); methods (the research design); positive and negative outcomes/concerns. By categorising the articles into these elements, I could get a general overview of BL initiatives.

With regards to the first element, all studies were conducted by Malaysian academics, who taught English language in their respective higher education institutions. As regards to the purpose, most studies tried to investigate how BL has impacted on students' and teachers' teaching and learning. Overall, most studies focused on students' and teachers' perceptions, satisfaction and attitudes towards BL initiatives. There was one study that focused on students writing learning outcomes.

Table 2: BL innovations in Malaysia

Study	Purpose	Methods	Positive outcomes	Negative outcomes/concerns
Fook Fei et al., (2012)	**To uncover instructors' perceptions of a conventional course book and web-based self-access practice.**	Qualitative: focus group and semi-structured interviews with ten instructors.	• Teachers had positive perceptions of the book and web-based self-access practice. • Teachers felt that the online exercises were innovative and the automatic grading saved time. • Teachers felt that students were motivated and able to monitor their own learning.	Teachers felt that: • Level of reading comprehension was not challenging. • That perhaps students did the online exercises as an obligation. • A lack of student-teacher interaction which was essential. • BL (online setting) was limited to exercises and did not allow peer discussion. • Internet connectivity to the website was not reliable.
Siew et al., (2012)	To identify students' perception of course book and its online component.	Qualitative: Focus groups consisting of 34 students from different disciplines.	• Students perceptions of the course book were generally positive. • Students thought the BL approach could improve their language skills. • Students perceived the online components as new and enjoyable. • Students could access the materials out of classroom.	• Proficient students found the content was not challenging enough. • Students felt that internet connection was unreliable. • Students had many online exercises to complete. • Students said there was lack of interaction and explanation from teacher.
Karimi et al., (2013)	To explore the relationships	Quantitative approach: a	• Trainees felt satisfaction with the approach and in learning collaboration and interaction.	• No suggestions for a better designed programme were offered.

Study	Purpose	Methods	Positive outcomes	Negative outcomes/concerns
	between perceived learning and satisfaction in a blended teacher education programme.	cross-sectional survey of 170 teacher trainees.	• There was a moderate correlation between perceived learning and satisfaction.	
Wah et al., (2014)	To investigate 120 in-service TESL teachers; the affordances and contradictions from the lens of Activity Theory	Qualitative approach: focus groups interviews and reflective journals.	• In-service teachers found benefits mostly in terms of improving their IT skills, pedagogical skills, learning skills. • Some in-service teachers found that they had to be creative when collaborating together in a non-f2f setting.	• In-service teachers found small challenges covering: connectivity, time and language barrier – (some prefer 110 per cent English, some preferred a mixed-language approach)
Mohamad et al., (2015)	To discover students' perceptions of BL course in English for life sciences (adult learners)	Qualitative approach: A case study using observation, Think-Aloud protocol and semi-structured interviews of first year adult students.	• Students said the articles provided in the course were good, relevant and beneficial. • Students who used to reading journals perceived the contents as not difficult.	• Students commented that teacher used some untrustworthy resources of some of the hypermedia documents. • Students felt the contents of the BL documents were uninteresting due to unfamiliar words, jargon and terminologies and lack of bi-lingual glossary made the reading difficult. • Students questioned the accuracy of translation of English terms to Malay. • Students lost interest in reading due to the

Study	Purpose	Methods	Positive outcomes	Negative outcomes/concerns
				documents that were lengthy and wordy and dull. • Some students complained of eye strain and mental fatigue affected students' reading, reading on a screen was more difficult. • Access to technology (no Internet connection, not owning a laptop and short retention power) added challenges.
Md Nawi & Sidhu (2016)	To evaluate ESL listening skills materials	Qualitative approach: Interviews of 30 diploma first semester students.	• Students enjoyed the BL classes, in particular high proficient and high motivation students. • Students (high proficient) preferred BL mode because they could engage in a more autonomous way. • Having competency in technology influenced students' perceived ease of use. • Students showed overall positive attitudes and satisfaction towards BL.	• Less proficient students more inclined towards f2f mode and needed instructor to guide them. • Some students struggled with native speakers' accent and pace. • Students found it difficult to get reliable Internet connection on campus. • Students wanted the online tasks to be made compulsory and graded.
Abdul Rahman (2018)	To measure English writing performance using blended learning in TVET course	Quantitative: Experimental design of 30 Polytechnic students (test and survey).	• Experimental group showed higher scores than in control group. • BL improved writing performance in general.	• Challenges to adopt BL must be considered.
Ahmad	To evaluate	Quantitative:	• Teachers had positive readiness to learn using	• Too many buttons and links that distract

Study	Purpose	Methods	Positive outcomes	Negative outcomes/concerns
Shukri & Md Yunus, (2018)	teacher education through BL	Surveys of 111 Pro-ELT students.	online platform • Teachers learned best via online learning sessions in writing and listening skills. • Teachers felt cognitively ready for tests.	teachers' attention • Teachers felt that speaking skill is the least benefitable via online platform • Teachers opined that the online interface as not interactive as Whatsapp, Facebook • Teachers found it difficult to navigate the website
Ab Wahab, Mohamed Zain, & Md Yunus (2018)	To explore the blended learning experience among 21st century language learners	Mixed methods: Surveys and interviews, documentation, observation (25 students).	• Students enjoyed the course, engaged in activities and performed well in assessments. • Students felt more independence to learn, f2f mode helped clarify doubts, more motivated to learn. • Students had easy access to course materials	• No students preferred online discussion and video recordings due to lack of interaction in the forum and refused to be recorded due to unpleasant environment (noisy).
Hussein, Mustafa & Shaari (2018)	To gauge students' perception towards the integration of technology in English language learning	Quantitative: Surveys of 32 first year English for Business communication students.	• Students displayed positive attitudes and perceptions of technology integration in English course. • Students agreed with technology use, their English improved. • Autonomous learning and enhanced interaction were promoted • Blending technology was a source of excitement, motivation, learning and attraction.	• Some students perceived blended learning as troublesome and time consuming. • Students experienced technical difficulties when learning

Six out of ten studies employed qualitative research design, four were quantitative studies while only one was mixed methods design. The majority of the cases had a single mode of research design either quantitative or qualitative and only one mixed methods study. In terms of the quantitative findings, descriptive statistics were the most presented and only one study measured correlations between perceived learning and satisfaction levels. In the qualitative papers, coding strategies were used to represent the findings while descriptive statistics and coding strategies were used in the mixed methods design.

With regard to the positive outcomes, it can be said that in almost studies, students and teachers had positive perceptions about BL and experienced satisfaction with the innovations. Students and teachers perceived blended as promising and interesting. Students' motivation seemed to be enhanced, autonomous learning promoted, and collaboration encouraged more in a BL approach. More importantly, students claimed that their language skills improved in terms of writing, listening, and this left them more prepared for tests. However, there was very little empirical evidence on this. Some of the students said they enjoyed learning through BL and cited it as a source of 'excitement'. Teachers claimed that their marking time was reduced because students could attempt additional reinforcement and received instant feedback from automatic tests.

However, there were also concerns about BL innovations. Some of the negative outcomes revolved around the difficulty level of content, challenges in promoting interaction and engagement, access to platforms (internet connectivity, design, and training). There was some diversity in students' and teachers' attitudes and motivation. In particular, students who were less proficient in English showed less preference for a BL approach. Time and effort were needed to familiarise students and teachers with the technology.

A criticism of the studies is that most did not offer theoretical constructs. Out of ten studies, only one study introduced a theory perspective, activity theory. Thus, the studies remained at a very descriptive level and were not explanatory. I look at this in more detail in the following section.

Theories in Educational Research

Theoretical Position

Every research design needs some theory of the phenomena being studied to guide the design decisions that you are going to make (Maxwell, 2005). "There are many kinds and levels of theory, from 'grand theory' (like Marxism) to middle and low level theory that appeals to common sense" (Wolcott, 2005; Atkinson, 2010). Theory is defined as 'a general principle, supported by considerable data proposed as an explanation of a phenomena; a statement of the relations believed to prevail in a comprehensible body of fact' (Koetting & Januszewski 1991, pp.401–402). Theory has been used to provide reasoning for some patterns that might occur in a certain context or behaviour. In other words, theory is an attempt made to describe and define principles, or to an extent to establish relations between facts. By theory does not always mean a grand theory but could be more middle ground. Eisenhart (1991) describes a theoretical framework as 'A structure that guides research by relying on a formal theory…constructed using an established, coherent explanation of certain phenomena on relationships (p.205). The establishment of a theoretical framework serves to incorporate the views and findings of other scholars on a particular research subject of interest in order to justify a specific research focus and approach (Kumar, 2005).

In my study, I am looking at how technology adoption is conceptualised. Among many theories, my interest was focused, but not restricted to, Community of Practice, Technology Acceptance Model, Three-Zone Framework and Activity Theory. Each theory has its own distinctive way in constructing, describing and explaining social phenomena.

Community of Practice (CoP) was developed by Jean Lave and Etienne Wenger in 1991. This theory refers to a group of people who engage in a collaborative activity or share a concern for something they do and learn how to do it better as they interact. Three characteristics are vital in determining the community of practice: the domain, the community, and the practice. The domain defines the identity of those who share domain of interest, who value their collective competence that brings the members together. The community refers to a group of people who do not necessarily work together nor have the same job and title but those who build relationships that allow them to learn from each other. Trust and friendship are essential to encourage the

willingness to share ideas, admit ignorance or ask for help. The practice covers the work of practitioners who share experiences, stories, tools and findings ways of addressing problems.

Another key term is legitimate peripheral participation. This is about the induction of new members in the community. LPP begins by observing and taking on some of the less important task before moving on to a more complex tasks and taking up a more central role. Lave and Wenger believe people only learn in practice and view learning as socially situated activity. Situated learning theory and cognitive apprenticeship suggest learning is acquired through authentic contexts and interaction between peers and experts about the contexts. Knowledge is not viewed through the transmission from one individual to another. Instead it is co-constructed through the social process. However, although CoP describes very well how community works, it does not give a wider view of the purpose of the community. People get together into community almost autonomously to achieve their goals. But what they want to achieve is not autonomous, it obeys the logic of the market system or curriculum or whatever and CoP does not help us understand this wider context.

Technology Acceptance Model (TAM) was first developed by Fred Davis in 1989. This is an information system model that looks at how users come to accept a technology and how they use the technology. Two key factors are considered when users are introduced with a new technology: Perceived usefulness (PU), and perceived ease-of-use (PEOU). PU describes the degree to which a person believes that his or her job performance can be improved through the use of the new technology whilst PEOU refers the degree of effort. These two elements influence users' decisions and behaviour. The key idea of TAM is to pay attention to the use of tool. However, the key problem with TAM is that it encourages us to think about usefulness and ease of use in abstract rather than in the specific context in which people are working. Thus, for example, usefulness in teaching cannot be divorced from the idea of the curriculum, what needs to be covered in the curriculum.

The Three-Zone Framework was expanded by Valsiner in 1997 from Vygotsky's (1978) Zone Proximal Development framework. This human development theory was broadened by g the combination of social setting, objectives and actions of participants.

Zone Proximal Development (ZPD), Zone of Free Movement (ZFM) and Zone of Promotion Action (ZPA) are used as a means of understanding potential development. This framework when used in teaching enables researchers to have a better understanding of what encourages integration of technology and what limits the use. For example, when technology is being introduced, but people are not ready for it, then it is not within their proximal development. Similarly, in terms of free movement, if teachers are free to adopt or not to use technology, some people might not use it at all because there is no requirement to do so. But on the other hand, some people might use it more creatively and interestingly even without being told. So, each intervention throws up a difficult balance in respect to the three zones, with different consequences. An interesting perspective about this theory is it does not suggest nor propose any ideal result because balance is key. However, unlike TAM, three-zone begins to bring in contextual issue, what is being promoted, for example. Nonetheless, it does not present a deeply holistic view. This theory does not tell about policy. The vision is more at the level of a teacher rather than the level of institutions. Most importantly, three-zone theory does not emphasise the use of tools.

In seeking to get more holistic view about technology take up, my attention moved to activity theory. Activity theory (AT) analyses the process human activity through a historical and socio-cultural lens (Engeström, 1999; Jonassen & Rohrer-Murphy, 1999). What makes this theory significant is the systematic identification of human interaction activity, and human thought within a specific context. Activity Theory is a theory that was first introduced by Vygotsky (1978) and expanded by Leontiev (1981) and Engeström (1987) and is also known as Cultural-Historical Activity Theory (CHAT). Cultural-historical activity theory (CHAT) offers a more holistic framework to investigate relationships among the elements that are present within a particular system or context. From the activity theory lens, a holistic analysis of socio-cultural and historical lens could be identified (Engeström, 1999; Jonassen & Rohrer-Murphy, 1999). Besides the methodological framework, CHAT also offers practical tools to be applied in various context including education. Research studies in education have used the CHAT framework in analysing different aspects pertinent to teaching and learning repertoire including ICT (e.g. Blin & Appel, 2011; Gedera, 2014; Timmis, 2014).

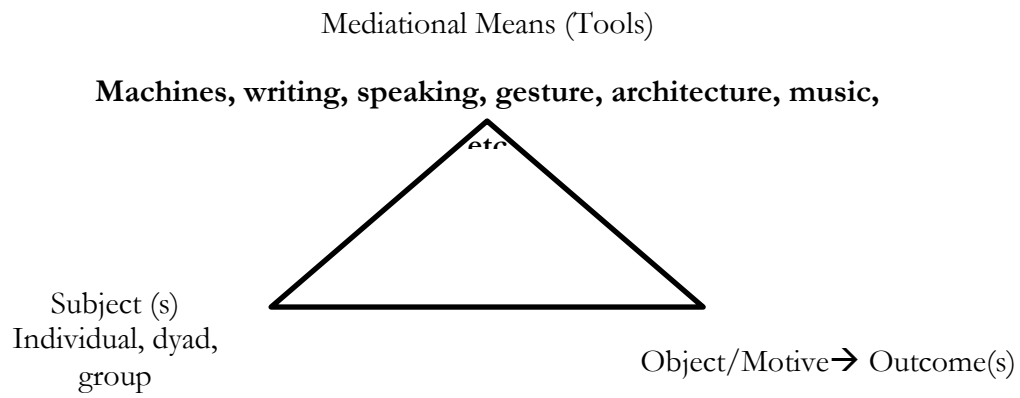

Figure 2: First Generation of Activity Theory

Figure 2 shows the first generation revolved around Vygotsky's (1978) concept of mediation. The first generation of activity theory focus on subject, object and mediational means. Vygotsky argued that human relationship with an object is not straightforward. Society and culture are two elements that influence the relationship, which occurred from the psychological tools such as language and thinking. These cultural-historical psychology tools emerge from human activity mediated by artifacts (tools) and signs.

The second generation of AT developed by Leontiev (1974) looks at six different elements of CHAT that comprised of actors (subjects), object (goals/motivation), mediated tools, division of rules, community as well as rules (see Table 3). The system is depicted as a triangle to show relationships between elements. Activities are seen as a collective in which at its core a subject is striving to achieve an object or goal. Leontiev (1974) further describes the object-oriented activity as:

> *"…activity is a unit of life mediated by mental reflection whose real function is to orient the subject to the world of objects. Activity is thus not a reaction or a totality of reactions, but rather a system possessing structure, inner transformations, conversations, and development* (p. 10)

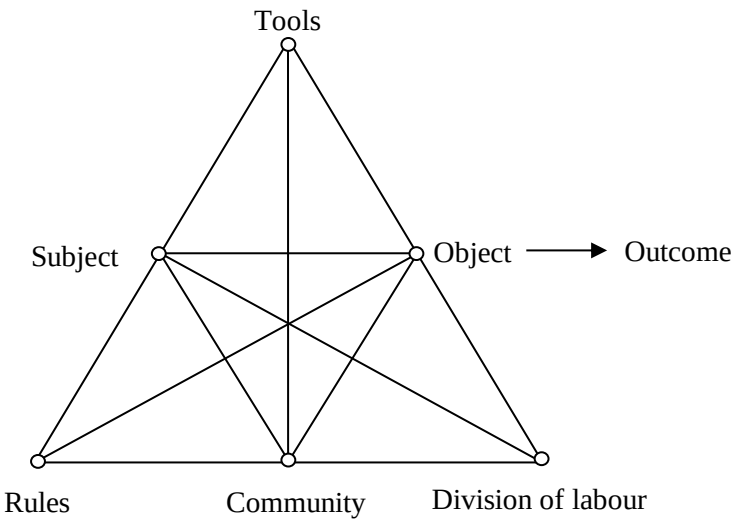

Figure 3: Second Generation of Activity Theory

For Leontiev (1974), CHAT analyses human interaction within a group. At the core of activity theory is the idea of a subject i.e. a person trying to achieve a goal/object. However, this always takes place in a context which shapes the activity off the subject. This context was influenced by the rules, community, and division of labour. For Leontiev, activity is driven by how an individual make sense of their environment that also the physical and cultural characteristic of the environment. In the activity system the relationships are between one element and another. For instance, the subject's action is influenced by the object while the object is influenced by how the subject mediated the tools. Activity is transformed from a reciprocal process of the subject, the object, and the relationship between the two and their context (Davydov, 1999). Cultural formations and its structures are formulated within an activity (Engeström and Miettinen, 1999; Leontiev, 1974).

Table 3: Summary of CHAT elements

Element	Description
Tools (Artifact)	• An artifact is an aspect of the material world that has been modified over the history of its incorporation into goal-directed human action (Cole, M. 1996: 117)
Subject (Agency)	• The relation between subject and object: Asymmetrical • Ability to produce effects • The agent is the subject of activity with the ability and needs to act • The real-life study of technology: A part of unfolding human interaction with the world
Object	• What action is directed towards • Motivate activities • Separates one activity from another • Dynamic: transforms as the activity unfolds - Available tools and signs
Rules	• Explicit and implicit • Norms and values • Conventions and standards constraining action
Division of labour	• Participation in socially distributed work activities • Individual action: motivation by one object but directed towards another
Community	• Individuals/social groups who share the same general object

The development of CHAT was continued by Engeström (1987). The 3rd generation further developed relationship between the individual, artefacts and behaviours (Engeström et al., 1999). Unlike Leontiev, Engeström's expansive learning acknowledges the dynamic nature of the activity system. Engeström's version is not static instead a system can adapt to changes. For instance, when new mediated tools are introduced, the existing tools can be a hindrance to the implementation of the new ones. Hence, tensions/contradictions might interrupt the system. His key point is that an activity system comes with contradictions and understanding those contradictions enables people to identify what is holding up change and to work on it (Blin & Munro, 2008; Timmis, 2014).

Engeström (1999) developed this representation by taking into account two interacting activity. According to Engeström (1987), actions are usually intentional and carried out

through a series of routinised and automated operations which are mediated by artefacts/tools either materials (books, computers, machinery) or psychological (language, sign systems, models). This 3rd CHAT generation made clearer the importance of the community element (participants who take part in the same activity), and rules and division of labour (to show how work is organised). Contradictions in the activity system may be triggered innovation and can be a source of development (Barab et al., 2002; Blin & Munro 2008; Engeström 1987; Engeström 2001; Helle 2000). Engeström (1999) saw the subject as not the only main agent of change, but the environment should be considered as a part of the factor that causes changes within and between activity system. New activity systems occur when 'reflective appropriation of advanced models and tools' as 'ways out of internal contradictions' (Cole & Engeström 1993, p.40). I found the diagram unworkable because of its complexity.

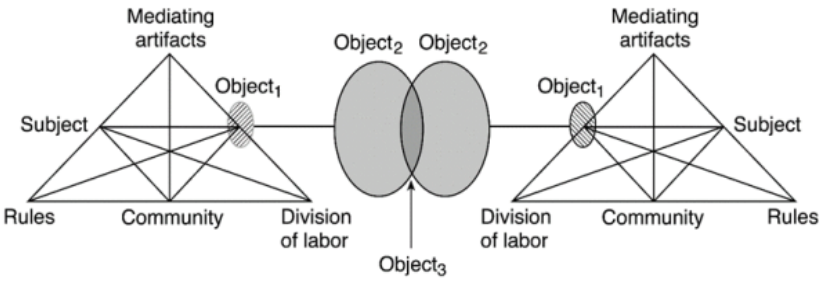

Figure 4: Third Generation of Activity Theory

CHAT in Technology Studies

CHAT has been used in other studies of technology in education, (e.g., Blin & Munro, 2008; Blin & Appel, 2011; Gedera, 2014; Jelfs & Whitelock, 2001; Karasavvidis, 2009; Keengwe & Kang, 2013; Timmis, 2014; Wah et al., 2013). CHAT has enabled a holistic picture of activity system and to draw attention to contradictions within a system to explain why certain objects have not been successfully achieved. One of the examples of the contradictions is assessment that does not match the goal of what is promoted. For example, when a goal is for collaborative learning, but the system and the assessment are individualized, contradictions can occur. Similarly, lack of support from the community for teachers to use technology in teaching for instance, can also cause contradictions due to the mismatch between object with what the community offers. Very often action is perceived as conscious, goal-directed processes. Thus, the need to

fulfil the object is deemed as necessary. However, the action sometimes is being deflected by contradictions, for instance, the implementation of ICT in education. This is where CHAT is able to signify types of contradictions which provide a way to understand the problem of take up analytically. CHAT emphasises that activity needs to be analysed through the seven elements without being separated from the context of the activity.

For my study, I will be largely influenced by the 2nd generation of CHAT because I found the 3rd generation as unworkable due to its complexity. However, the 3rd generation is very important for me in understanding the system and to understand the contradictions in the system. In that sense, my study can be considered as a hybrid of these two generations. I intend to use CHAT with a little twist in that I am looking to integrate different types of subjects within a system.

Criticisms of CHAT

There are several criticisms of CHAT. First, it is often used in rather a reductionist way. For example, activity system is often seen as a framework that is capable of explaining every phenomenon. Usually, people approach this framework from a top down reductionist way. The diagram can be easily misunderstood as a causal model. The second major criticism of activity theory is that of over-socialisation. Over-socialisation happens when an individual is overburdened by weight of role prescriptions. In other words, the individual has no inner life or agency. They are merely described by their roles. This means that internal conflict within the individual is absent. This claim if further supported by other authors in their critiques of the activity system conceptualisations. It is in fact, recognised by scholars who are largely sympathetic to CHAT (Daniels 2008; Valsiner & Van der Veer, 2000; Wheelahan 2014). Very often a subject merely assumes a role as a representation. Individual distinctiveness is disregarded, and this does not acknowledge individual strengths and weaknesses at an individual level. "Each's ontogenies and ontogenetic development are unique, any one person's prior experience is not and cannot be the same as others as it is individually negotiated through a lifetime of interactions with the social world." (Billett 2006, p.67)

Summary

In summary, this chapter started with a vision of technology emerging from three different views: optimist; pessimist; and realist. Our views of the integration of technology were seen as skewed by these three different perspectives. Attention was given to definition of BL in terms of the percentage of time spent and pedagogical integration. BL could fall on a continuum between f2f and online settings. Seven models of BL were fleshed out i.e. blended f2f, blended online, flipped classroom, rotation models, self-blended, blended MOOC, and flexible models. The relationship of BL to VLE or LMS was discussed.

BL was adopted mostly due to affordances such as personalisation, extending classroom, interaction, assessment and access to information. However, there were also limitations on take up including lack of time, curriculum fit, and planning. Some of these issues were discussed at a national, institution, and individual level. A consistent picture was seen with regard to BL innovations in Malaysia, in particular in English language teaching and learning in particular similar affordances were identified and technical issues were also major constraints. Activity theory was introduced as it offered a holistic framework to explore human interaction and technology integration. Further elaboration of the methodology and methods is now discussed in Chapter 3.

Chapter 3: Methodology and Methods

Introduction

Having decided to explore BL at the university, I now describe the context of the study and how I wanted to research it. Chapter 3 is divided into eight sections:

- research paradigm
- research design
- location
- methods
- pilot study
- main studies
- data analysis
- ethical considerations

Research Paradigm

Research paradigm refers to how problems are identified; the epistemological and methodological assumptions behind the research; what is done with the research. Research paradigm can also identify as a lens, a worldview, which provides theories, models, exemplars, values and methods shared by a community of scholars.

Ontology concerns claims about the nature of being and existence. In particular, there are ontological assumptions that the world is real and objective and there are also ontological assumptions that the world is constructed in the minds of people, in particular socially constructed in the minds of people collaborating together. Sometimes, the ontology is described as foundational (objectivist) or anti-foundational (subjectivist). Epistemology is about how we acquire knowledge, the specific beliefs we hold about the nature of knowledge, what it means to know, what is knowable and the methods of knowing.

The interpretivist epistemology is the idea that we come to know by understanding people's perspective on the world. The positivist epistemology is about to know by using the technique of natural science to identify cause and effect.

Debate about epistemology and ontology and are often become intertwined. Epistemological considerations provide the logic of an enquiry and without understanding that logic, the research will be incoherent.

In social research, two dominant approaches to inquiry, quantitative and qualitative methods, are often put forward. Quantitative research is often associated with a positivist approach. From a positivist perspective, concepts are viewed as 'real and capable of objective definition' and hence countable (Hammond & Wellington, 2013, p.30). Qualitative research on the other hand, is often linked to interpretivist or 'constructivist' stances. From an interpretivist perspective, concepts are 'nominal' and emerge out of social interaction to reflect human needs and interests. Interpretivist often tried to understand the meaning that cultural and institutional practices have for those taking part (ibid).

There are problems with these accounts of ontology and epistemology. The first problem is that whether researchers use numbers or not, does not define their epistemological position. Positivist researchers might be interested in measuring people's opinions whilst the interpretivist researchers might want to count the number of responses the participants made. However, the larger problem is that epistemological stance of a researcher does not usually fit clearly at one end or another of a positivist and interpretivist spectrum. As a matter of course, very few people call themselves pure positivist because they realise the research, they are producing does not have the same status as laws in natural science. In contrast, many interpretivists recognise that there is an objective physical reality. What they are interested in doing is getting perspective of that reality. This puts most researchers somewhere in the middle of the spectrum.

In trying to address this problem, people have put forward new concepts such as pragmatism, critical realism, and post-positivism. Rather than offering a dogmatic stance in the nature of a reality, pragmatists often see questions of ontology as questions that cannot be answered. Rather they are interested in epistemological approaches, focus on

what is suitable for different circumstances, and what we can see as the consequences of the action that people take. In practice, this often means adopting a mixed methods approach. A mixed methods approach is often described as pragmatic in which methods are chosen according to their 'fit for purpose'. According to Johnson & Onwuegbuzie (2004), the combination of methods mean that numbers give meaning to narratives and narratives give meaning to numbers. This is my paradigmatic position. My study was largely informed by qualitative methods through observations and interviews and complemented by quantitative method via surveys.

Research Design

Yin (2009) defines a case study as "an empirical enquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not evident and in which multiple sources of evidence are used" (p.18). A case study is often sub-divided between single and multiple cases. A single case study has an overarching concern for phenomena even though they might take place across different sites. A multiple case study, in contrast, treats each site as separate. Each design has its strengths and weaknesses. A single case allows a focus on phenomena but often takes place at a single location and does not allow generalisation of a conclusion. Meanwhile, multiple case design provides varied sources of evidence which enhance their credibility (Campbell, 1975).

My study meets the criteria of a case study as it is empirical, it looks at the real-life context, and the boundaries are evident. It is best understood as an overarching case with two different cases within it. Within each case, I employed mixed methods design which started with a quantitative method of enquiry followed by a qualitative one and resulted in an overarching interpretation (Creswell & Plano Clark, 2007). The mixed methods designs have been popular among researchers in recent years. The main reason is that the combination allows the augmentation of validity and reliability of the instruments and data. Numerical data in the form of questionnaires and text data in the form of interviews and classroom observations allow triangulation of data to be carried out and heighten the dependability and trustworthiness of the data interpretation.

Bryman (2004) suggests that there are four basic mixed methods designs: convergent parallel design; exploratory sequential design; explanatory sequential design and

embedded design. My study best fits a sequential explanatory design as the data collection began with a quantitative followed by qualitative ones. The qualitative phase helped explain the broad patterns suggested from the quantitative data. A questionnaire survey was used because although qualitative methods tend to be up-close, holistic and useful for characterising the process, they are insufficient to show how prevalent a behaviour is, or how generalisable a pattern of behaviour is. To fill this gap, a quantitative inquiry was adopted so that it could provide complementary sets of data (Zohrabi 2013). As for the analysis, I carried out a draft of the first analysis of the quantitative data before the qualitative. However, there was not enough time to carry out a detailed analysis. Because of this, the analysis is best understood as concurrent.

Yin (2003) also describes three categories of case study: exploratory, descriptive and explanatory. Exploratory case studies set out to explore a phenomenon serves as a point of interest to the researcher. These are often open ended and inductive. Descriptive case studies on the other hand set out to describe a phenomenon sometimes with the aim of giving voice to the participants or making a context more widely publicised. Explanatory studies, as the name suggests, set out to explain the phenomena. These explanations are often about confirming or testing in the broad sense, a theoretical framework and contributing to wider social science theory. This distinction is problematic as studies can be explanatory, descriptive and exploratory at the same time. Thus, my study is best understood as an explanatory design given my concern for the use of CHAT and its value in describing the use of BL. However, it also has descriptive and exploratory elements, particularly as regards the qualitative data.

A mixed methods design was adopted. I started with quantitative data collection and followed with qualitative data collection. A benefit of using both quantitative and qualitative is that it allows for depth and breadth in analysis of the complex and particularistic nature of the activity system in BL. The quantitative data was employed to measure the spread of opinion and practice regarding BL. The numerical aggregation in summaries and responses were then clustered to address some part of the research questions. Meanwhile, the qualitative data was helpful to go into attitudes and behaviour in depth. Observation data, as a part of the qualitative methods, was also conducted in accessing practice of the participants. This addressed gaps from both sets of data collection.

After analysing both phases separately, data triangulation could be carried out by comparing findings from both methods. Integration could give more confidence in results and conclusions drawn from the study (O'Cathain et al., 2010), another benefit of a mixed methods design. Other researchers add that through triangulation certainty of findings (Coyle & Williams, 2000; Sieber, 1973) and interpretations (Morse & Chung, 2003) can be obtained.

Location of the Study

This study was carried out at the university to which I was and will be attached after completing my study. I taught English Proficiency 2 courses to the diploma and degree students before coming to England. The rationale for choosing this site was one of access. It would be very difficult for me to access sites other than one where I was known and had had a professional role. This was advantageous for me because I could draw on what I knew about the system through my background knowledge. The disadvantage of choosing my university, of course, is that I might not look at it with fresh eyes.

There were two main locations of the university: the old and the new campus. My study was conducted mainly at the new campus. Having gone through the teaching and learning procedures and as a technology enthusiast myself, I wanted to understand the use of technology in my university clearly. I also wanted to have a better understanding of the key issues and problems, one of which, as discussed throughout this thesis, was the use of BL. As seen earlier, a lot of debates on the use of technology in teaching and learning were focused around MyGuru and this is clearly where my research led.

I had the advantage of being able to access and research the whole population of English Proficiency students, but I decided to focus on two cases: English Proficiency 3 (EP3) and English Proficiency 4 (EP4). This gave me access to varying levels of English ranging from beginner to advanced levels. In general, all courses were different in terms proficiency level. Course normally have between 40 to 50 people. For the researched semester, the total population of degree students who enrolled in the EP1 to EP4 courses was approximately 5490 people. I only managed to reach 300 students from 3 EP3 (148 students) and 3 EP4 (152 students) courses, 16 language teachers and 2 MyGuru support staff. I had chosen EP3 and EP4 courses and not EP1 and EP2 due

to the latter courses being mainly taught by part-time language teachers who did not use MyGuru as a part of their teaching.

The reason why I wanted to investigate ICT support staff's view was because I noticed there was not a single study in Malaysia that had looked at the role of the ICT support staff. The ICT support staff had played a huge role in supporting the online learning besides developing and maintaining the system.

Theoretically, EP3 courses are designed for upper intermediate students while EP4 courses are designed for more advanced students. Despite this, in practice, my background knowledge told me to be cautious of the proficiency label. From my observation and data obtained from Questionnaire 1, students' enrolment to EP3 course was done before the completion of EP1 and EP2 courses regardless of students' proficiency level. In order to advance to the next EP course, students were expected to complete assignments, quizzes and sit for a summative test at the end of the course. Students were then allowed to advance to the next level upon gaining the minimum marks. However, in case of failing to obtain the minimum grade (C), students had to retake the same course. The same procedure applied to students who wanted to enrol on EP4 course.

As regards the students' actual proficiency levels, EP3 students were expected to be able to communicate without much difficulty but still make mistakes and misunderstand sometimes. EP4 students on the other hand, supposedly could speak and understand very well but sometimes had problems with unfamiliar situations and vocabulary. Interestingly, data shown later indicated that the majority of the students in EP3 (59 people) and EP4 (92 people) were graded at Band 2 in MUET out of 6 Bands altogether roughly equivalent to A1 in the Common European Framework of Reference (CEFR).

Methods

Table 4 : Research Timetable

Stage	Activity	Methods	Date
Pilot Study	- Pre- and post-course survey of students - 17 (Questionnaire 1 and 2) distributed - 17 (Questionnaire 1) and 9 (Questionnaire 2) returned	- Questionnaire 1 & 2	27th July 2016
	- Pre- and post-course survey of teachers - 8 (Questionnaire 1 & 2) distributed - 4 (Questionnaire 1 & 2) returned	- Questionnaire 1 & 2	25th July 2016
	- Interview of student - 1 student	- Semi-structured interview questions	29th July 2016
	- Interview of teachers - 2 teachers	- Semi-structured interview questions	30th July 2016
	- Classroom observations - 1 video clip	- Observation schedule	4th August 2016
Main Study	- Pre-course survey of students and teachers - 300 questionnaires distributed and returned - 16 questionnaires distributed and returned	- Questionnaire 1	5th – 16th September 2016
	- Classroom observations - EP3 course (5 times) - EP4 course (4 times)	- Observation Schedule	5th – 23rd November 2016
	- Post-course survey of students and teachers - 300 questionnaires distributed, 294 returned - 16 questionnaires distributed 16 returned	- Questionnaire 2	14th Nov – 23rd Nov 2016
	- Interviews of Teachers (7), Students (15) and MyGuru support staff (2)	- Semi-structured Questionnaire	5th Sept – 23rd Nov 2016

Research Timetable

The timetable of research is shown in Table 4. As can be seen, there are different methods used, surveys, interviews and observations. Questionnaire 1 was distributed to all students and language teachers at the beginning of the semester. One EP3 and one EP4 courses were selected for the observation throughout the semester. The classes were chosen based on approval received from the class teachers, V and S. The observation was conducted between week 2 to week 10.

Questionnaires 2 were distributed towards the ending of the courses (week 10-11) to both student and teacher participants. For the interview sessions, the participants were chosen based on their willingness to participate after completing Questionnaire 1. At the end of Questionnaire 1, there was one item seeking students' and teachers' permission to take part in a follow-up interview (see Appendix A). In doing this, the participants were required to provide their contact details. Fifteen students (seven EP3 students and eight EP4 students), and seven language teachers agreed to take part. Meanwhile, two MyGuru support staff were willing to be interviewed after I had emailed them in person and also received approval from the Chief Information Officer (CIO). For the purpose of interviewing the MyGuru support staff, I sought a separated approval from the the ICT CIO in complying the ethical procedures.

Surveys

Two surveys were carried out: a pre and post course surveys of students and teachers. The surveys had a combination of closed-ended, open-ended, list of choice and Likert-type scale questions as these were efficient means of collecting data on a large scale (see Appendix A). Surveys can be sent to many people at one time with secured anonymity.

Initially, I decided to adopt a perceptions and attitudes questionnaire from a study by Ja'ashan, (2015). However, after critically going through each item, I found the items in the questionnaire to be only partially relevant to my research aims. Therefore, I decided to develop more of my own items which would cover the research areas that I planned to address. To do this, I reviewed literature related to CHAT and tried to relate my questionnaires to each element (Table 5). For example, when it came to subject, I mapped out several key issues including demographic, sociocultural and history.

I did not hand out a questionnaire survey to MyGuru staff since there were only two of them, so I asked similar questions about their experiences during an interview session. I tried my best to cover all six elements in Table 5.

I ended up with a questionnaire of 18 questions created for the students' Questionnaire 1, and 14 questions for the teachers' Questionnaire 1. 52 items were constructed for students' and teachers' Questionnaire 2. After discussing the first draft of the questionnaires with my supervisor, I deducted some items that were irrelevant to my research questions and left only 12 items for Questionnaire 1 and 40 items (students) and 40 items (teachers) for Questionnaire 2.

The structure of both student and teacher Questionnaire 1 was mixed: multiple choice, dichotomous and open-ended while Questionnaire 2 consisted of 5 Likert-type ranged from 1- strongly disagree to 5 - strongly agree with one open-ended section in the teacher Questionnaire 2. In the student Questionnaire 2, there were four negatively worded statements (18, 19, 20, and 23) whilst there were two negative items (15 and 19) in the teacher Questionnaire 2. Negative items were included to avoid a response set where subjects respond favourably or unfavourably to all items (Marsh et al., 1984).

To test the items, I conducted a small-scale survey of 8 teacher-participants and 17 student-participants who had past experience of using BL. Further details of the findings can be found in the pilot study section. Tables 6 and 7 show the arrangement of each questionnaire item on the pilot Questionnaire 2 according to the CHAT elements. Pilot Questionnaire 1 was solely on the subject element.

Carrying out a survey as one of my methods enabled me to reach a large number of respondents. This is one of the most important opportunities of surveys – the possibility of going wide rather than deep (see Hammond and Wellington, 2013). However, surveys are constrained, it is not possible to go back respondents and ask why they answered as they did and there is a clear limit on what can be asked before the respondents have had enough and are unwilling to complete any more. It is also possible that, in spite of testing, respondents might misunderstand or misinterpret questions, in my study I was able to address this by being personally on site during the data collection.

Table 5: CHAT descriptions

Element	Descriptions
Tools	• MyGuru, EP learning modules, Instructional Plan, Syllabus, Computer, Classroom • External Resources (reading materials, references, texts) • Access to facilities and resources • Affordances • Strengths/Weaknesses
Subject	• Language teachers, EP3 and EP4 students and MyGuru support staff • Demographic info (name, age, gender, experiences with work, tools and BL) • Social, cultural background • Historical Factors • Psychological/Spiritual/Physical • Behaviour • Skills
Object	• Goal/Motive
Division of labour	• Horizontal and vertical • Roles • Interaction • Participation and contribution • Leadership
Rules	• Design of the course • Explicit and implicit • Norms and values • Assessment driven • Course organisation • Curriculum and syllabus • Policy • Types of activities
Community	• Teaching community - Roles • Learning community - Roles • MyGuru staff community - Roles
Outcomes	• Successful rate • Problem/Task • Challenges and difficulties • Preferences • Affective/Cognitive/Behavioural • Impact on learning

Table 6: Pilot Students Questionnaire 2 arranged according to CHAT

Element	Item
Tool	1,2,3,4,5,7,11,15, 16, 17, 19,21,31,32, 35,36
Object	8,9,10,11,13,14,34, 39
Division of labour	6, 18, 20, 22,23, 24, 30
Rules	25, 26,27,28,29, 33, 37,40
Community	38

Table 7: Pilot Teachers Questionnaire 2 arranged according to CHAT

Element	Item
Tool	1, 2, 4, 5, 7, 10, 11, 14, 15, 26, 27, 35, 36, 37, 40
Object	9, 16, 31, 32, 33, 34, 38, 39
Division of labour	6, 17, 18, 19, 20, 22, 25, 30
Rules	3, 12, 13, 21, 23, 25, 28, 29
Community	8

After the main study was carried out, item 28 was omitted because the item did not turn out to measure what I intended it to measure. In the final Questionnaire 2, there were 39 items and the findings were based on these.

Since I developed the items of the questionnaire myself, I had doubts about the preciseness of my interpretation of CHAT elements. I even had difficulties with fitting some items into elements of CHAT even after a thorough discussion with my supervisor. Therefore, I left the quantitative data analysis for a while and focused on the qualitative analysis. After analysing the interview, a clearer perception of themes emerged.

As a result, an object element was excluded in the final student Questionnaire 2 and replaced by outcomes as one of the post CHAT elements. As for the teacher Questionnaire 2, tool and object elements were removed and replaced by an outcomes element instead. The finalised items of each element for student Questionnaire 2 and teacher Questionnaire 2 are shown in Tables 8 and 9:

Table 8: Finalised items of Questionnaire 2 according to CHAT (Student)

Element	Item
Tool	3, 17, 19, 25, 31, 35
Subject	1
Rules	10, 28, 29, 37

Element	Item
Community	2, 13, 18, 20, 27,30, 32, 33, 38
Division of labour	6, 22, 23, 24, 26
Outcomes	4, 5, 7, 8, 9, 11, 12, 14, 15, 16, 21, 34, 36, 39, 40

Table 9: Finalised items of Questionnaire 2 according to CHAT (Teacher)

Element	Item
Subject	1, 7, 11
Rules	21, 23, 25
Community	2, 8, 14, 26, 27, 28, 35
Division of labour	6, 17, 18, 19, 20, 22, 24, 36, 37
Outcomes	3, 4, 5, 9, 10, 12, 13, 15, 16, 29, 30, 31, 32, 33, 34, 38

Reliability and Validity of the Questionnaire Survey

In quantitative research, reliability refers to the consistency, stability and repeatability of results (Twycross & Shields 2004). There are three types of reliability measures: over time (test-retest reliability), across items (internal consistency), and different researchers (inter-rater reliability). The most common measure of internal consistency used by researchers is a statistic called Cronbach's Alpha, **α.** By definition, Cronbach's Alpha is the mean of all possible split-half correlations for a set of items.

In order to measure the internal consistency of the scale, the normal assumption that each scale is supposed to measure the same construct is violated, and alpha underestimates the reliability of the test (Tavakol & Dennick, 2011). For my study, I computed the overall subscales and split scale alpha values based on each CHAT element identified from the questionnaire items. Readings ranged from .537 to .931. According to Ramayah (2011), Cronbach's alpha coefficient values of more than 0.7 are considered good, but values of more than 0.5 are acceptable. The value can be increased by item trimming, but I wanted to keep all items because they were relevant to my qualitative findings. Below is the arrangement of each item according to CHAT in multidimensional concepts.

Table 10: Internal Consistency according to CHAT elements (Student & Teacher)

Variable	Student	Cronbach's Alpha	Teacher	Cronbach's Alpha
Tool	3, 17, 19, 25, 31, 35	.584	NA	NA
Subject	1	NA	1, 7, 11	.723
Object	NA	NA	NA	NA
Rules	10, 28, 29, 37	.567	21, 23, 25	.774
Community	2, 13, 18, 20, 27,30, 32, 33, 38	.720	2, 8, 14, 26, 27, 28, 35	.858
Division of labour	6, 22, 23, 24, 26	.531	6, 17, 18, 19, 20, 22, 24, 36, 37	.830
Outcomes	4, 5, 7, 8, 9, 11, 12, 14, 15, 16, 21, 34, 36, 39, 40	.877	3, 4, 5, 9, 10, 12, 13, 15, 16, 29, 30, 31, 32, 33, 34, 38	.730
Total		.921		.946

Validity, on the other hand, refers to the strength of the conclusions that are drawn from the results. There are four types of validity which include external validity, internal validity, test validity and face validity. Test validity is an indicator of the accuracy of quantitative research instruments. This includes three types of test validity: criterion-related validity; content validity; and construct validity. When using the mixed methods approach, validity can be determined using a convergent approach which is the content validity (quantitative) and triangulation (qualitative) (Creswell, 2014).

Content validity refers to whether the survey adequately covers all the content, checking that it should concern CHAT elements. For this purpose, I carried out three cross-checks with my supervisor and the questions did match the right elements. The justification for working on this with my supervisor was because he had a good understanding of my study context due to his involvement form the start of the project until the end. The cross-check was carried out before the pilot study and twice after the data collection. Despite a shared background in the project, we had difficulties in reaching a consensus. However, by drawing on the analysis of the qualitative interview, we were able to reach agreement about nearly all the elements. The changes to the questionnaires for each element could be seen aforementioned (see Tables 8 & 9).

Observations

Observations of F2F

I carried out two types of observations: f2f and online. I assumed a non-participant role in both classroom and online. This was because I was not teaching these classes and wished to avoid inappropriate involvement in the course activities (see Brook, 2004). I had also followed and taken the necessary precautions with regard to the ethical questions (see Ethical Consideration). Through observation, I could get a better understanding of the traditions associated with teaching and learning in this context and could deal more systematically with what was normally expected in a lesson. To help me record the events, I used a digital single-lens reflex camera (DSLR) (with permission) in each session, and I took notes using an observation sheet. One of the benefits of recording a lesson was that I could replay the recording as many times as I wanted. If I relied on my memory, I might miss events or forget them. Note taking was important as the whole class could not be recorded using a single camera. I recorded my notes based on the observation schedule.

When conducting the overt observation, I was aware of the importance of confidentiality in the recordings and the importance of deleting recordings once the study had finished. The challenge in carrying out observations is in getting access and since observations are time intensive this means that only a few can be undertaken. In my case I planned the schedules with both teachers in advance and made sure that I would be able to observe two courses in the same week. In observing it is important to consider in what way the observations were 'typical', for example whether the teachers were doing anything unusual. Another challenge is to work from a consistent schedule so that classes can be compared but also to be alive to unpredictable activity. In my case I worked from a schedule but also kept open notes on what I saw. Finally, observation is often intrusive and as explained I tried to merge into the background as far as possible.

When designing the observation schedule, I began by looking at examples of schedules devised by Emerson et al., (2011), Pyrczak et al., (2005) and Nicholas (2002). However, the role of the observation was limited. I did not need something as fine-tuned for my purposes. I wanted to focus on the broad shape of the lesson, for example how long the teacher spoke for and the phases within a lesson. In particular, I was concerned with

general patterns and how technology as a tool might fit into the pattern. In the end, I created a form which best fitted my goal of understanding the nature of the lesson and that covered: the physical setting; participation; roles; exact quotes; the shape of the lesson; impressions; use of technology and unanswered questions. I found that physical setting was the easiest to describe. Meanwhile with practice I was able to complete the sections about roles, indicative quotes, the shape of the lesson, the use of technology and impression. The nature of teacher and student participation was the most challenging aspect of the form.

Table 11: Observation Criteria

Criteria	Description
1. Physical setting	I described the classroom setting in terms of facilities provided for teaching and learning and the environment.
2. Participation	I described the frequency of teacher and student talk and what students were asked to do. • percentage of time T spoke • percentage of time Ss spoke • percentage of time Ss spent listening, reading, writing and grammar • percentage of time spent doing controlled practice/communicative language activity
3. Roles	I noted typical teachers' and students' roles during the lesson. I looked for how the teachers set the tone of their classroom and how the teachers managed the classes.
4. Exact quotes	I took notes of relevant quotes regarding the use of technology
5. The shape of the lesson	I drew out typical patterns of the lesson and activities, how it started, the activities in the middle and how the teacher summarised at the end of the class.
6. Impressions	I jotted down my thoughts of events that interested me. This was not limited to the use of technology.
7. Use of technology	I looked for what kind of technology was used during the lesson, whether MyGuru was used in between the lessons. I wanted to know whether or not technology might fit into the teaching.
8. Unanswered questions	I took notes on issues or concerns I had in the session and used these as triggered questions for the next observation.

Table 12: Observation Schedules

	Observation 1	**Observation 2**	**Observation 3**	**Observation 4**	**Observation 5**
EP3	Day: Monday Date: 19/9/16 Building/ Room: B08-2-BK45	Day: Monday Date: 26/9/16 Building/ Room: B08-2-BK45	Day: Thursday Date: 20/10/16 Building/ Room: DKP7	Day: Thursday Date: 3/11/16 Building/ Room: DKP7	Day: Thursday Date: 10/11/16 Building/ Room: DKP7
EP4	Day: Wednesday Date: 5/10/16 Building/ Room: B08-2-BK45	Day: Wednesday Date: 12/10/16 Building/ Room: B08-2-BK45	Day: Wednesday Date: 9/11/16 Building/ Room: B08-2-BK45	Day: Wednesday Date: 16/11/16 Building/ Room: B08-2-BK45	N/A

In total, I conducted nine observations. All observations were scheduled to take place in the normal classroom. There was a change of location for EP3 course due to timetable change in the middle of the academic term. For EP4, I could only observe four times because that was the only time that the teacher was available. However, I was satisfied with four observations.

Overall, I found the whole experience overwhelming because I had not had first-hand experience of conducting a classroom observation before. Before the first observation, I had informed teachers that I would be observing their lessons. Upon agreement, teachers then informed their students and asked if they were happy to be recorded. Before the lesson started, I briefly introduced myself and once again informed the students of my purpose in coming to the class. All of them agreed to be observed, and none of them approached me asking to be left out. I did not observe unusual reactions or anxiousness from the students. It seemed that all of them were fine with the observation.

I came early to each session to set up the camera. I placed the DSLR at the corner in front of the classroom/auditorium and planned to sit at the back of the class/hall for the note taking. After the lesson, I made a point of reassuring the teachers about my

observation and thanking them once again. During the lesson, I did not walk around the class because I did not want to distract the students.

My first observation began with EP3 course. During the class, the DSLR stopped recording, and I then had to sit next to the camera all the time to check how it was functioning. I then continued taking notes from that position. As explained, the EP3 class was moved to an auditorium midway through the planned observations. I began by sitting at the back of the auditorium, but it was so large that I needed to move. In this position, it was difficult to capture the whole class on camera as I did not have enough equipment to help me.

At first, I set down the DSLR on the stage next to the teacher. However, in that position, it was challenging for me to jot down the notes as there was only one table. Furthermore, being on the stage with the teacher might distract the students' attention when I had to move. What made the situation even more difficult was when the students were seated in a dispersed seating position. Using only one camera for the recording was not sufficient. I did not have extra equipment to help me record at different positions.

After a thorough review, in preparation for the next observation, I set up the DSLR in the front of the hall at the left corner of the auditorium. I found the video clips gave me a better overall idea of the lesson. The rest of the observation got easier as I proceeded because I knew what I was looking for. I honestly enjoyed the whole process as I could understand the teachers' personality, the interactions that happened in lessons and after the lessons ended. I also learnt what kind of activities captured and retained students' attention during the lesson. Not only that, I also learnt new techniques on using the DSLR which I perceived as an added value as an early researcher.

Apart from looking at the use of technology, the observations triggered questions in my mind in regard to the students' proficiency level. Although there was not extensive communication in the class, when students spoke, I could not help but notice the English of most of them was at a lower level than the classes they were assigned. During group discussions, students communicated mainly in their native language even though they were taking an English course. This deserves further discussion later. After the data collection, I compiled all data in a table form. I tried to identify the pattern of the teaching and came out with aggregated data.

Observations of Archive: Online Screen Captures

I wanted to look at online activity in order to see how MyGuru was being used. However, I was not provided with direct online access. Instead, I drew on my familiarity with MyGuru when I was a teacher. I had direct experience as to how the system worked and examples of teacher inputs to the system. From this, I had a good understanding of how the system could be used.

In order to get a more detailed view of MyGuru, I asked all teachers to show me MyGuru when interviewing and then I asked them two of them (**S** & **V**) to send me screen shots with examples of their participation, e.g. teaching materials they had uploaded or the assignments the students submitted. This gave me direct knowledge of the online activity. This part of the data collection was not ideal. Ideally, I would have liked to get access to the archives. However, I was happy that I had good insights into MyGuru and agreed with Imler & Eichelberger (2011) that video screen capture technology was good to track human-computer interaction

For EP3, **V** had captured 23 screenshots. These covered: two pdf files with week eight monitoring and writing assessment rubric; five PowerPoint documents to support essay writing; and eight Word documents. These included five essays from the students; two course descriptions; and a rubric for narrative essay writing. For EP4, S had captured 24 screenshots of overall activities conducted on MyGuru.

I learnt that EP3 and EP4 courses had achieved a BL mode status. The screen below is a screen capture of EP4 course that showed a blended mode status was awarded to **S** based on the frequency of use. A total of 158 resources were found uploaded, 148 activities were carried out and five online assessments were produced. These blended mode hits provided a useful quantitative measure of usage by the teachers.

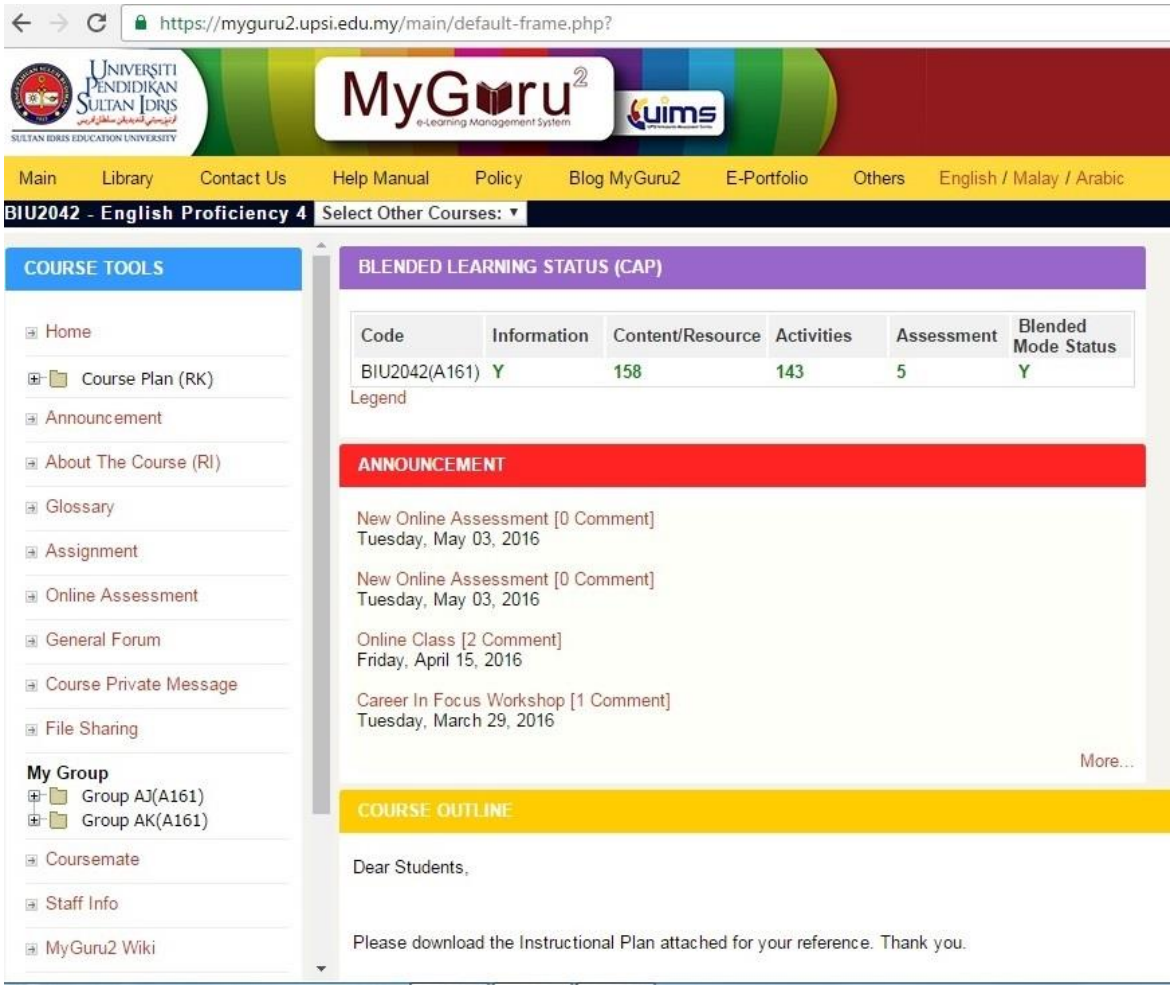

Figure 5: Blended Mode Status Achieved in EP4

Interviews

Burns (1999) contends that "interviews are a popular and widely used means of collecting qualitative data" (p.118). Interviewing is critical to get an in-depth understanding of the perceptions of those involved in a study. Interviews complement the broad description that is attainable by survey.

In this study, the interview acted as one aspect of triangulation of my findings. Patton (1990) imagines interviews as the flesh to cover the bone of (quantitative data) while the combination of these two could bring both in-depth and breadth.

The interview allows the researcher to be flexible and go in the directions that he or she had not thought about in advance and to some extent allows researchers to ask naïve questions as prompt to deeper understanding. Through interviews, the researcher can understand people's motivations and at the same time increase respect for and curiosity

about what people say and do (Rubin and Rubin, 1995). This process is not always as straightforward as it may seem. Although interviewer and interviewee may speak in a common language, understanding and empathy can be elusive. This could be due to different cultural meanings or different worldviews that each possesses. Since I had background experience as a teacher in the university, I could empathise with teachers but also with students.

There are several challenges in conducting interviews. First, the researcher has to respond with patience and flexibility, for example, I had to be understanding when an appointment had to be postponed due to unforeseen circumstances, even if I was frustrated at the time. Second, interviews can be time consuming and in my study they were. This meant that the number of interviews were of course limited. In terms of time challenges much time was spent in transcribing, analysing, feedback and reporting. An additional challenge here was that although I conducted the interviews mainly in English, there were times where I had to speak in my native language, which was Malay, due to request made by the participants themselves. MyGuru support staff, for example, had formally requested this. Responses were also gained in Malay. This meant a lot of additional work in translating the transcripts. Translation had to be tackled carefully as inaccuracies can cause serious problems of interpretation (van Nes et al., 2010). In helping me carry out the interview, I had created a semi-structured schedule. This provided me with a more flexible approach than using a closed schedule. At the same time, the semi-structured schedule gave me more focus and consistency than an open-ended schedule. I concurred with Bernard (1988) that semi-structured interview is best used when the researcher does not get more than one chance to interview participants, which was the case for my study.

The semi-structured schedule was developed based on the CHAT elements: tools, subject, object, rules, community, division of labour and outcomes (see Table 5) and further modification from the previous study by (Duignan et al., 2006). In total, there were 42 semi-structured questions for the student interviews, 48 semi-structured questions for teacher interviews and 22 semi-structured questions for MyGuru staff.

In getting approval for the interview, I approached each participant individually. For the student participants, I had recruited volunteers by asking whether respondents wanted to be interviewed. If so, they should fill in their names and contact details at the end of

Questionnaire 1. Initially, there were only nine students who were willing to be interviewed. After a few weeks, I was then approached by other students who wanted to be interviewed as well. Thus, in total, I had 15 interviews: 7 EP3 students; 8 EP4 students.

I approached teachers in their offices once I had received approval from the Director of the language centre of the university to seek approval to conduct the interviews. I finally managed to get a total of seven language teachers who agreed to be interviewed individually.

The procedure for MyGuru staff, was more stringent as compared to students and teachers. I had emailed the MyGuru officers individually. Despite their agreement to be interviewed, I still needed to seek permission through the Chief of ICT officer. I then contacted the Chief of ICT via email, and in responding to my email, I was requested to send the interview questions beforehand. This, according to the ICT officers, could help smooth the flow of the interview sessions later.

To help me record the interviews, I used a Philips VTR6600 voice tracer which is a digital audio recorder with sensor touch buttons. This device helped me record a total of 24 interviews for my study. The breakdown of each interview session is presented in Table 13 as follows:

Table 13: Interview Details and Schedules (Students, Teachers, MyGuru Support Staff)

Code	**Gender and Ethnic Background**	**Role, Years of working/teaching experience/ semester currently in**	**Place of interview**	**Date of interview**	**Duration of interview**
EP3 One	• Female • Chinese	3rd year bachelor's degree in Mathematics (Edu)	KFC	15 Nov 2016	23 minutes 56 seconds
EP3 Two	• Female • Malay	3rd year bachelor's degree in Mathematics (Edu)	KFC	15 Nov 2016	21 minutes 29 seconds
EP3 Three	• Female • Malay	3rd year bachelor's degree in Mathematics (Edu)	KFC	15 Nov 2016	24 minutes 10

Code	Gender and Ethnic Background	Role, Years of working/teaching experience/ semester currently in	Place of interview	Date of interview	Duration of interview
					seconds
EP3 Four	• Female • Malay	2nd year bachelor's degree in Psychology	University Café	17 Nov 2016	33 minutes 45 seconds
EP3 Five	• Female • Malay	2nd year bachelor's degree in Psychology	University Café	17 Nov 2016	47 minutes 46 seconds
EP3 Six	• Male • Malay	3rd year bachelor's degree in Software Engineering	Tutorial room	21 Nov 2016	20 minutes 28 seconds
EP3 Seven	• Male • Chinese	3rd year bachelor's degree in Accounting	Tutorial room	21 Nov 2016	20 minutes 55 seconds
EP4 One	• Female • Malay	4th year bachelor's degree in Sports Science	Over the phone	22 Nov 2016	35 minutes 19 seconds
EP4 2 Two	• Male • Bumiputra	4th year bachelor's degree in Psychology	Tutorial room	16 Nov 2016	32 minutes
EP4 Three	• Male • Malay	4th year bachelor's degree in Sports Science	University Library	18 Nov 2016	40 minutes 55 seconds
EP4 Four	• Female • Chinese	4th year bachelor's degree in Sports Science	University Library	18 Nov 2016	31 minutes 02 seconds
EP4 Five	• Male • Malay	4th year bachelor's degree in Software Engineering	Tutorial room	18 Nov 2016	32 minutes 09 seconds
EP4 Six	• Female • Malay	4th year bachelor's degree in Sports Science	Secret Recipe	22 Nov 2016	38 minutes 30 seconds

Code	Gender and Ethnic Background	Role, Years of working/teaching experience/ semester currently in	Place of interview	Date of interview	Duration of interview
EP4 Seven	• Female • Bumiputra	4th year bachelor's degree in Psychology	Café	22 Nov 2016	15 minutes 47 seconds
EP4 Eight	• Female • Bumiputra	4th year bachelor's degree in the Malay Language	University Library	22 Nov 2016	29 minutes 02 seconds
S	• Female • Malay	English teacher, 6 to 10 years	University Office	23 Nov 2016	61 minutes 45 seconds
T	• Male • Malay	English teacher, 6 to 10 years	Pizza Hut	12 Oct 2016	56 minutes 04 seconds
U	• Female • Malay	English teacher, 1 to 5 years	University Office	17 Oct 2016	26 minutes 08 seconds
V	• Male • Malay	English teacher, 6 to 10 years	University Office	23 Nov 2016	48 minutes 52 seconds
W	• Female • Malay	English teacher, 6 to 10 years	University Office	12 Oct 2016	39 minutes 39 seconds
X	• Female • Malay	English teacher, 6 to 10 years	University Office	17 Oct 2018	58 minutes 20 seconds
Y	• Male • Malay	English teacher, 6 to 10 years	University Office	9 Nov 2016	52 minutes 04 seconds
A	• Female • Malay	More than 5 years	ICT building	28 Sept 2016	21 minutes 21 seconds

Code	Gender and Ethnic Background	Role, Years of working/teaching experience/ semester currently in	Place of interview	Date of interview	Duration of interview
B	• Female • Malay	More than 5years	ICT building	28 Sept 2016	31 minutes 09 seconds
Summary	• 16 females and eight males • 19 Malays, 3 Chinese, and 2 Bumiputras	• 3rd and 4th year students • 1 to 10 years working experience for teachers	• Eateries near university • University buildings • Over the phone	Between September to November 2016	842 minutes 58 seconds

In total, all 24 interviews lasted for 842 minutes and 58 seconds. Almost all interviews were conducted in f2f mode at different places based on the interviewees' preferences except for EP4 1 which was a telephone-based interview. This was because the EP4 1 participant could not make it to the appointment and I suggested a telephone interview, and she agreed to do so. Among the interview locations were eateries, classes/tutorial rooms, university's offices, and the library near the campus, which were all located in Perak, Malaysia.

My overall experience with the interviews was surprisingly pleasant. At first, I thought I might have trouble findings participants, especially student participants, because I had no position or role in the university. However, after being briefed about the study, some of the students seemed quite excited to share their experiences once they knew I was an independent researcher. I also reassured them before the sessions started that their interview data would be kept confidential and anonymous. This led them to feel more relaxed and less anxious during the interviews.

I also noticed a different ambience with students, teachers and MyGuru staff when I conducted the interviews. For the students and MyGuru staff, the interviews were conducted in English and Malay languages, taking consideration that some of them might not be proficient in English. However, the MyGuru staff requested to speak fully in Malay because it was the common procedure to speak in the native language when

dealing with the government officers. As I was also a proficient speaker of Malay, I did not have any problems with this request.

Interestingly, although I expected the interviews to be conducted in Malay because students were more proficient in that language, many of them wanted at least to try to speak in English as they felt it was an opportunity to improve their language skills. In the event, many ended up switching to Malay or would mix up English with Malay.

An ethical challenge from the interviews was that as the teachers were my colleagues, I had to make an extra effort to reassure them about anonymity and not gossiping about the interviews with other colleagues. Rapport is a key issue in the conduct of interviews and I managed to carry out interviews which I thought were relaxed and comfortable for everybody concerned. For example, I did not have to keep prompting because the interviewees knew what they wanted to share. The teachers, in particular, were very forthcoming in their answers. In contrast, perhaps due to differences in position or language barrier or even lack of understanding of the interview questions, some students seemed to hold back. To overcome this issue, I tried to establish a good rapport and over the course of the interview students became open and more engaged. When a researcher engages in interviews, it is crucial for the researcher to establish a good interpersonal relation with participants (see Guillemin & Heggen, 2009) as otherwise the interviewee is unlikely to say very much and feel constrained in anything they do so. Good rapport enables researcher to build trust and free communication. I started off the interview by calling the participants by their names and injected some elements of humour in the conversation (see Zakaria and Musta'amal, 2014) to reduce any feelings of tension. I then tried to maintain eye contact and show that I was listening and responding to what was said (e.g. Leach, 2005). I avoided jargon and technical language throughout my conversations. I felt that rapport was easy with teacher participants than MyGuru staff and perhaps this was due to our shared background understanding. (Note the challenges of coding are covered later – see pages 81-83)

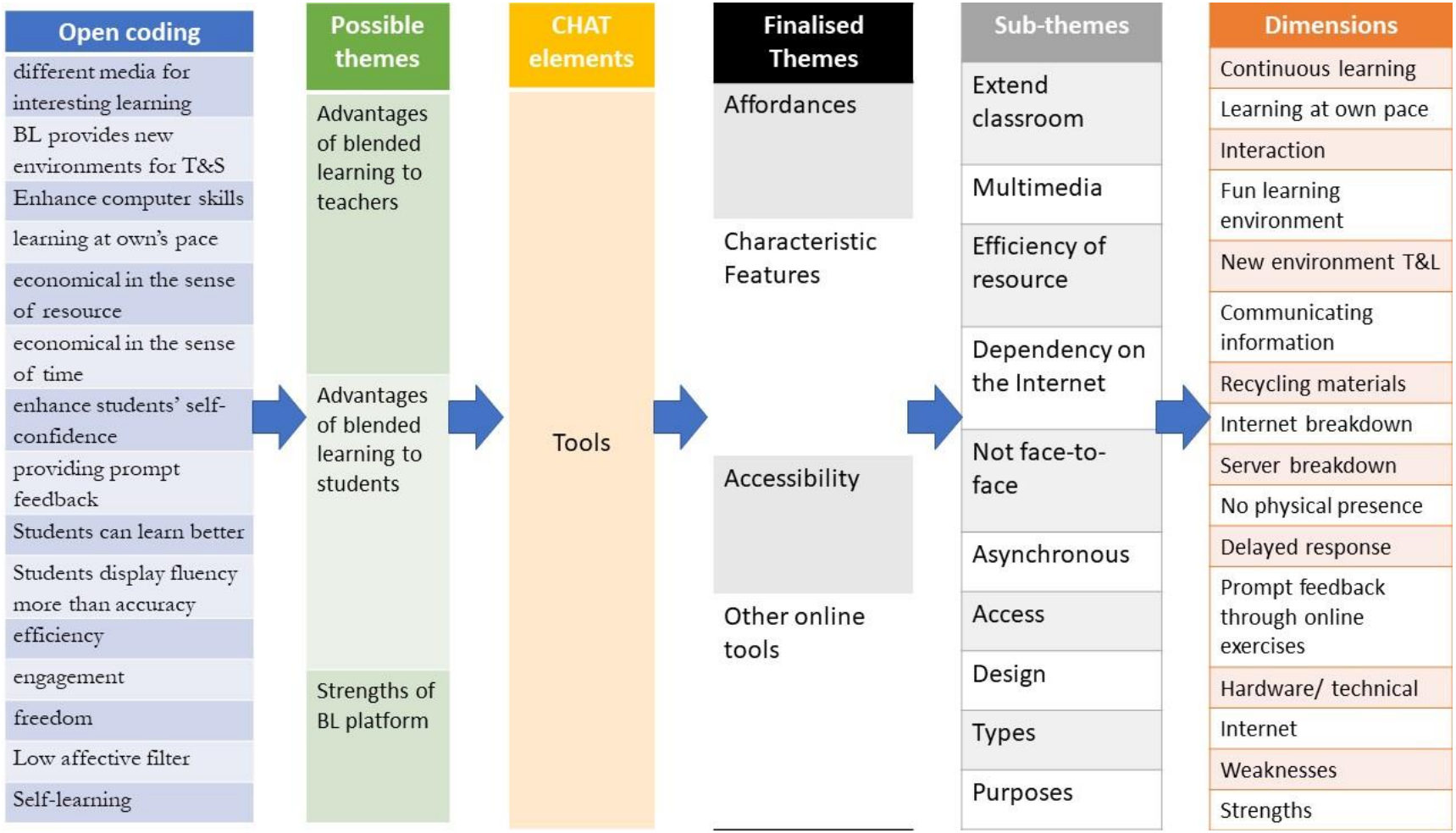

Figure 6: Excerpt from Codes Reduction

Reliability and Validity of the Observation and Interview Instruments

Trustworthiness is essential in ensuring the quality of qualitative studies. "Trustworthiness of a research report lies at the heart of issues conventionally discussed as validity and reliability" (Seale, 1999, p.266). Although there is an argument that the judgement of reliability in a qualitative study is irrelevant, other scholars take a different view. Lincoln and Guba (1985) state that "Since there can be no validity without reliability, a demonstration of the former [validity] is sufficient to establish the latter [reliability] (p. 316)."

The validity concept of qualitative method is not fixed or universal and not even limited to a single definition. Creswell and Miller (2000) suggest that validity is affected by the researcher's perception of validity based on their assumptions of the research paradigm. Consequently, various terms related to the conceptualisation such as quality, rigor and trustworthiness audit trail of every step of data analysis was prepared (see Chapter 4) for confirming that the data accurately portrayed participants' responses. In terms of transferability, findings from my study are only transferrable to similar EP degree students at the university under certain circumstances and contexts.

A similar process of verifying the observation schedule was done with my supervisor through the practice of observing a video clip. Detailed explanation of the process can be read at the pilot study section. A few modifications to the observation schedule were made.

Pilot Study

Following good research practice, I carried out a pilot study with the instruments that I wanted to use in the main study (for summary see Table 4). The pilot study refers to a trial run in preparation of the main study in order to evaluate the feasibility, time, cost, adverse events and improve the study design before main study execution (Hulley, 2007). My pilot included the questionnaire, interview and observation.

Pilot: Questionnaires 1 & 2 (Students)

The challenge of carrying out the pilot study was recruiting volunteers. For the pilot questionnaire, it was not important for me to get a representative sample of my target population. My main goal was to get some feedback on the accessibility of the

instruments. I was, however, aware that the choice of respondents and the medium of delivering the questionnaires were important considerations.

The first step that I took was to approach a student representative whom I had taught on the English Proficiency course in the previous years. I was in England when I approached her through email and social media (Facebook and Instagram) platforms. I found the student responded quicker via social media than email. After contacting the student, I asked if she could fill in my questionnaires asking about her previous experiences using MyGuru in the EP courses. At the same time, I also sought her help in getting some of her friends to join in the pilot study.

I had doubts about contacting the students, but I made it clear that she did not have to take part in the pilot study if she did not want to. I had a good relationship with her when I was her teacher and kept a good relationship since then. When I requested her help, I was no longer a lecturer there, and she had already graduated from her study at the university. Therefore, this pilot study had an element of being retrospective, which required the respondents to reflect back on their past experiences. The other students were participating purely on a voluntary basis. I had not asked them to join the study.

To deliver the questionnaires, I used a Google form (Questionnaire 1: https://goo.gl/forms/xcu34ecrE2dZFvTL2; Questionnaire 2: https://goo.gl/forms/OUu5vdbwIOwqikpV2), and I mailed the links to the respondents on 27th July 2016 via Facebook. Again, most of the students responded more quickly to social media than emails.

Google form was chosen as the main data distribution method due to an unlimited number of free questionnaires that could be developed on the website; the questionnaire format was also supported on mobile devices which gave users options of devices to answer the questionnaires. Data could then be directly downloaded and imported to SPSS or easily converted into MS Excel format. Google form provided a basic analysis of the findings by calculating the frequencies and percentages for each response. This saved my time and helped me analyse my data quickly.

In the end, 17 questionnaire responses were received. Initially, I only planned to get five volunteers. This was because I had anticipated difficulties in getting volunteers mostly

because I was away from Malaysia. However, I was pleased to receive so many participations.

Despite the benefits mentioned above, I was also aware of the shortfalls of using an online form. I found that 8 out of 17 student respondents did not answer Questionnaire 2. This may have been because I asked them to try both questionnaires and they might have not realised that there were two. As Meadows (2003) suggests the potential of low response rates could be due to the self-administered distribution. Furthermore, I could not pick up any misunderstandings without physically being there. Thus, I decided to administer the questionnaire for my main study via f2f mode.

After gathering the data, I sought feedback from the respondents via messenger on Facebook. Overall, it seemed the questionnaires were well written and could be understood. I would keep to these questionnaires in the main study though I made some presentational changes or corrected one or two grammatical errors.

As I had more responses than predicted, I decided to run a test of internal reliability of the Likert-type items using SPSS. The result of the Cronbach's Alpha showed internal consistency, α of .841. This result portrayed a good internal consistency of all 40 items. For more of this, see the main study.

Data from Questionnaire 1 (12 items) were broken down by percentage response while Questionnaire 2 data (40 Likert-type items) were summarised in Mean and Standard Deviation (SD). I do not reproduce here all the findings from my pilot study, but I present some examples to illustrate how the pilot study was conducted and some demographic data that gave a little background on the respondents. The responses to the questionnaire were presented with these abbreviations: SD*: Strongly Disagree;* SWD*: Somewhat Disagree;* NAND*: Neither Agree nor Disagree;* SWA*: Somewhat Agree;* SA*: Strongly Agree.*

From Questionnaire 1, six respondents (35.3%) were male, and 11 respondents (64.7%) were female. Their ages ranged from 19 to 23 years old. As for the MUET band, 4 (26.7%) obtained band 3, 9 (59.9%) band 4 users, 1 (6.7%) band 5 and 1 (6.7%) had yet to sit for the test. This shows that most of the respondents were of intermediate proficiency. Fifteen of the respondents were ethnically Malay (88.2%) with one ethnically Chinese (5.9%), one ethnically Bumiputera Sabah (5.9%) and one ethnically

Kadazan (5.9%). Sixteen of the respondents (94.15%) had Malay as their first language while only one respondent (5.9%) had English as their first language. This shows the variety of ethnicity and background of Malaysian students and the most common language was Malay. The Likert-type scale items in Questionnaire 2 were presented as Weighted Mean (WM) and Standard Deviation (SD). The reason for doing this is discussed later (see Data Analysis). One of the examples is seen in Table 14 as follows whilst the summary is represented in Bar Chart as in Figure 8:

Table 14: Pilot Study data of Community Element (Student)

Community	SD	SWD	NAND	SWA	SA	WM	SD
1. The university provided MyGuru training for students	0	2	4	2	1	3.22	.972
13. I got the technical support I needed during this course	1	1	3	4	0	3.11	1.05
18. My teacher did not reply my queries	0	1	4	3	1	3.44	.882
20. The teacher was not available for the activities in MyGuru	0	1	4	2	2	3.56	1.01
27. I received feedback for my classroom assignments from my teacher	0	1	4	4	0	3.33	.707
30. The teacher took part during the online activities	0	0	6	3	0	3.33	.500
32. I attended MyGuru training provided by the	1	2	4	2	0	2.78	.972

Community	SD	SWD	NAND	SWA	SA	WM	SD
university							
33. I received feedback from teacher of my activities on MyGuru	0	0	7	2	0	3.22	.441
38. Getting technical support was easy	0	2	3	3	1	3.33	1.00

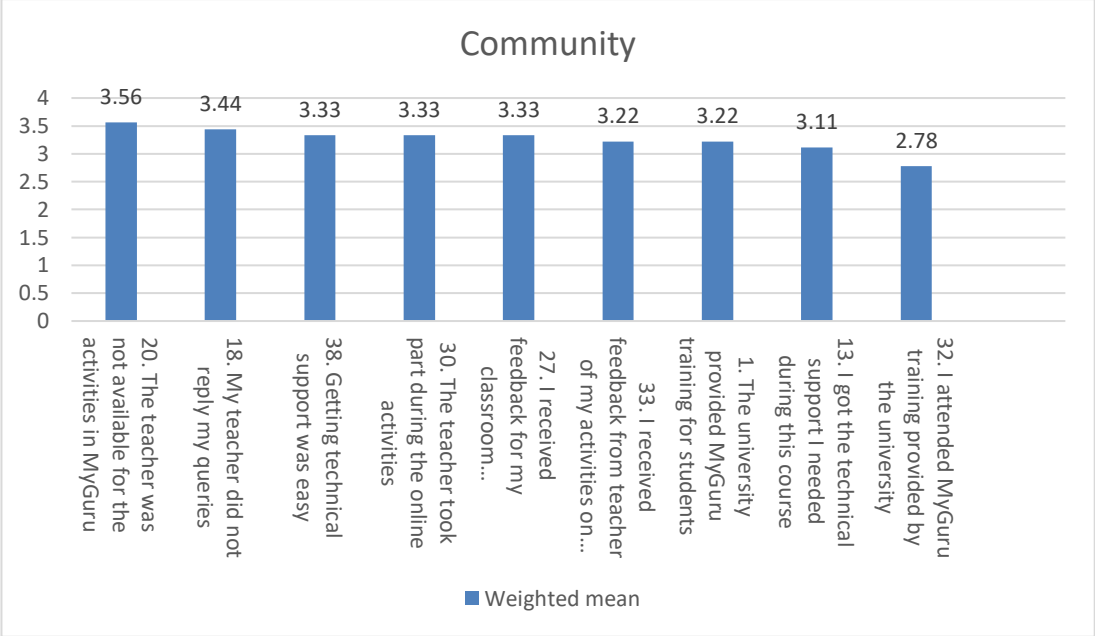

Figure 7: Community (Pilot Study)

Pilot: Questionnaires 1 & 2 (Teachers)

In respect to teacher questionnaires, the same challenge was faced in finding volunteers who had experienced teaching using a BL approach. I did not approach the language teachers in the university as I would need to approach them again for the main study.

Instead, I approached a few language teachers and asked them to take part in my pilot study. Two were in England while the other six were at a distance. Before the questionnaires were distributed, all eight teachers were briefly interviewed regarding whether they had experience of using BL. All said they had.

I distributed the links to the questionnaires on Facebook messenger. The questionnaires were again administered online using a Google form. Questionnaire 1

(https://goo.gl/forms/WCZ4QnPOKhzMDl6u2) and Questionnaire 2 (https://goo.gl/forms/PeuGed48D3Ng2nO53) were shared with each respondent individually on 25th July 2016.

Out of 8, only 4 of the respondents attempted the questionnaires: one male and three females with ages ranged from 25 to 32. All of them were of Malay ethnicity. Three of them had 6 to 10 years of teaching experience while one had less than a year. Again, Questionnaire 1 data were broken down in percentage response while, for Questionnaire 2, the 5 Likert-type items were presented in Mean and Standard Deviation (SD) and grouped based on the CHAT elements. In testing the questionnaires' internal reliability, I could not run a reliability analysis due to the sample size being too small.

After analysing the data, I again sought feedback from the respondents. The teachers said that they could relate the questionnaires to their experiences of BL. The respondents could answer almost all items except question 6, "How often do you log in to MyGuru?", about which two respondents sought clarification. This item did not indicate the duration of login, either for a day, a week or for a month. By considering their queries, I made changes by g the login duration for a week. Findings for Questionnaire 2 were presented in Weighted Mean (WM) and Standard Deviation (SD) as in Table 15.

Table 15: Pilot Study data of Division of Labour Element (Teacher)

Division of labour	SD	SWD	NAND	SWA	SA	WM	SD
6. I made an effort to integrate classroom and online activities with each other	0	1	2	1	0	3.00	.816
17. I discussed with my colleagues regarding the teaching materials	0	1	1	1	1	3.50	1.30
18. I acted as a	0	1	0	3	0	3.50	1.00

Division of labour	SD	SWD	NAND	SWA	SA	WM	SD
facilitator in MyGuru							
19. I did not interact with students in MyGuru and only monitored them from afar	1	1	1	1	0	2.50	1.29
20. I consulted with my course coordinator regarding the activities on MyGuru and in classroom	0	1	2	0	1	3.25	1.71
22. I encouraged students to participate in classroom activities	0	0	0	2	2	4.50	.577
24. I worked together with other colleagues when designing the course	0	1	2	0	1	3.25	1.26
35. Managing the online activities was…	0	0	3	0	1	3.50	.500
36. Managing the classroom activities was…	0	0	1	3	0	3.75	.500

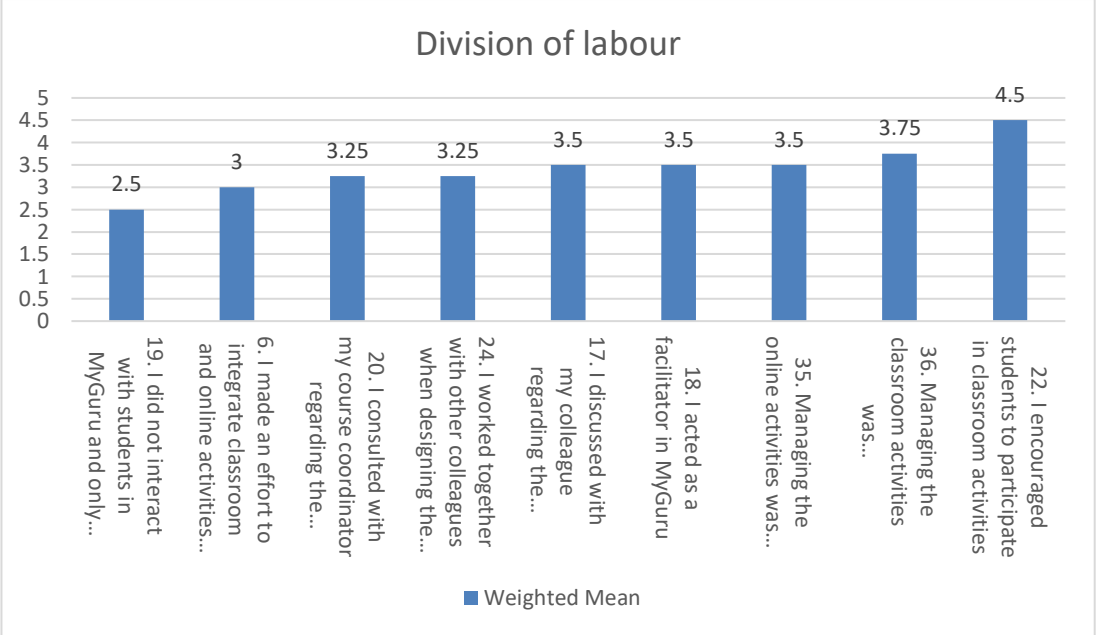

Figure 8: Division of labour (Pilot Study)

Pilot: Classroom Observations

With regards to piloting my observation schedule, I could not go physically to the classroom. Instead, I accessed a YouTube video that showed a similar learning environment to the ones I was familiar with at the university in Malaysia. The 'lesson' was 5 minutes and 38 seconds. This clip showed that the total number of participants reached up to 200; in Malaysia the number of students is fewer than this (see Location of the Study). In general, I could see that the teaching and learning ambience in the clip seemed to match with most Malaysian classrooms. I used the observation schedule to record events. This helped me to gain more experience in observing and note taking.

With regard to the observation schedule, I looked at several examples of the schedules that had been used in research. I thought about what it was I wanted to focus on in the study. A key consideration for me was the teachers' and students' behaviour during teaching and learning. I created a composite schedule based on what I had seen in the video. As a result, my observation schedules were a combination of open and closed observation.

Pilot: Interviews (Students, Teachers and MyGuru Support Staff)

With regard to the interview, I had sought approval from two teachers and one student who had attempted the pilot questionnaires for the interview purposes. Semi-structured interview questions were developed based on CHAT elements (see Appendix B). The interview sessions with the teacher participants were carried out f2f while the student participant was interviewed via Facebook messenger.

During the interview sessions with the teacher participants, many people were entering the interview room. Noise from the conversation affected the interview session. I had to raise my voice to ensure that I could be heard by the participants. Taking this into consideration, I planned to book or go to a quiet place for the main study. One participant also complained of being thirsty during the session. The complaint could be because I did not prepare drinks for the participants. To prevent the problem recurring, I would prepare drinks and some refreshments in the main study interview sessions. In terms of content, two participants asked me to simplify or clarify some questions and minor adjustments were made.

Main study

The study was conducted in a 14-week English Proficiency class at the university: EP3 and EP4. EP3 was an English course for students who had passed EP2 while EP4 was designated for students who had passed EP3 and also for advanced students. These courses were offered for students across the university who had fulfilled the pre-requisite requirements as these courses are made compulsory for graduation. Students were required to obtain Band 3 in Malaysian University English Test (MUET) – which is equivalent to A2 in the Common European Framework of Reference (CEFR) or pass English Proficiency 1 course (BIU 2012) with a minimum of Grade C. The learning outcomes for this course were to enable students to use specific sentence patterns correctly and developing conversational skills. They were also expected to read and identify main ideas in given texts, develop main ideas and elaboration based on stimuli provided for essay writing as well as to participate effectively in group discussions. The structure of the course was a f2f classroom instructions for approximately 14 weeks (12 weeks of lessons, 1 week of study week and 1 week of examination week) with online elements in between the course. This course was an intermediate English language

course that provided students with the opportunity to practice the four language skills with extended grammar and vocabulary. Assessment was f2f and timed pen-and-paper test which covered accuracy in terms of grammar, reading exercise and short writing exercise.

MyGuru is one type of Virtual Learning Environment (VLE) or also known as Learning Management System (LMS). Instructors were encouraged to create and upload teaching and learning resources and promote online interaction. Students can download and upload learning materials in different types of formats e.g. teaching materials and submit assignments.

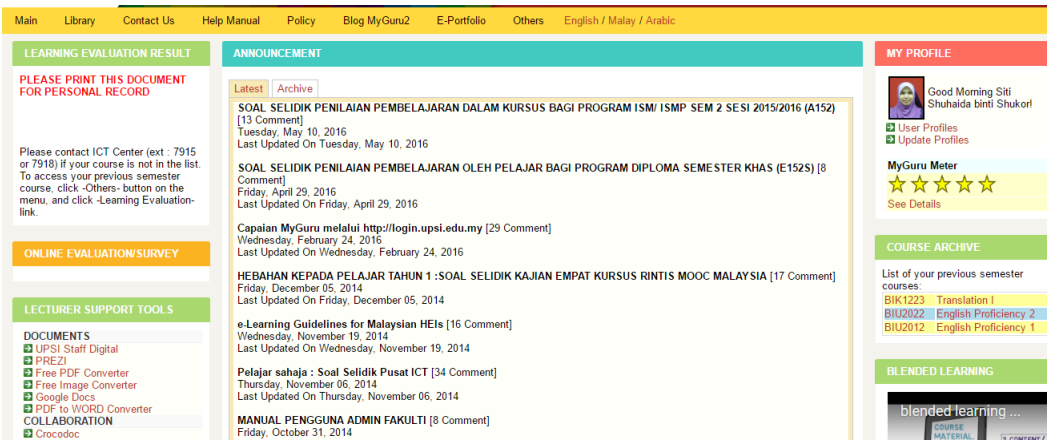

Figure 9: MyGuru Interface (part 1)

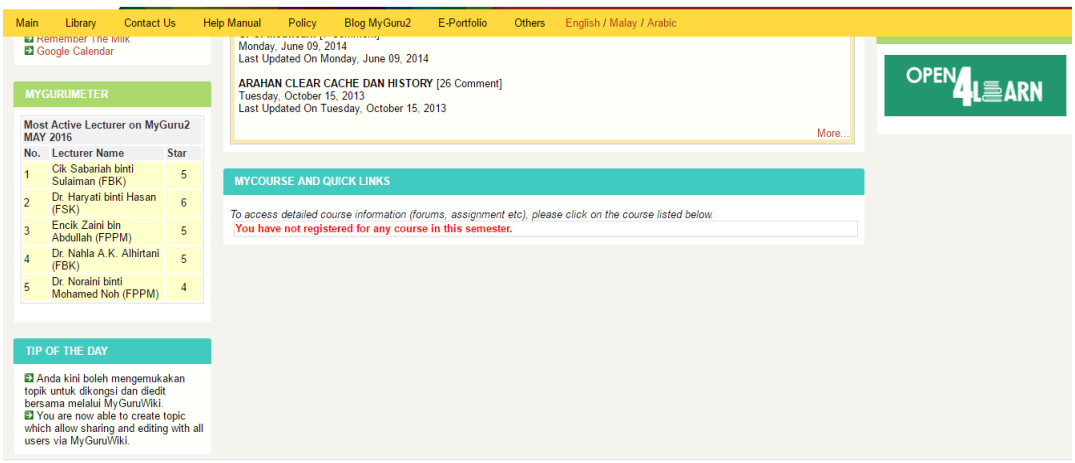

Figure 10 MyGuru Interface (part 2)

Figure 10 and 11 show examples from the MyGuru interfaces. *User's profile*, *course archive*, and *blended learning* information are located in the right column. In the middle column, *announcement*, and *MyCourse* and *quick links* are provided. In the left column, users are

presented with the *learning evaluation result*, *online evaluation survey*, *lecturer teaching support* tools, *MyGuru meter* as well as *tips of the day*. On the bar menu, there are links to the main *menu* (general announcement), *lecture notes*, *online forum discussion*, *online submission*, *private message)*, *the university library*, *contact us (the MyGuru support staff)*, *help manual* (in terms of links to pdf tutorial), *policy* of using MyGuru, *Blogs*, *E-Portfolio* and *Others* (general information). Students and instructors shared their thoughts on the course content or current issues via the forum discussion as well as private message tool. With regard to access to MyGuru, each student was automatically enrolled in the course upon registration while only a designated instructor had access to the specific group for each EP course. This was to ensure privacy for students.

In terms of classroom meetings, usually, a short lecture was given at the beginning of the class and followed up by classroom activities. The content of the course was mainly delivered by the language teacher based on the learning modules. Students were assessed using assignments and quizzes.

Data Analysis

Quantitative Data

The quantitative data were analysed to show the spread of views of students and teachers. This was enable using SPSS software (version 23) to find weighted mean and standard deviation for each item. For each CHAT element, the total aggregated mean was also calculated. The negative items (2 in student Questionnaire 2, 4 in teacher Questionnaire 2), the numerical values were reversed. The interpretation of the weighted mean is described as follows:

Table 16: Weighted Mean Interpretation

Scores	**Interpretation of Weighted Mean (WM)**
WM ≥ 4.5	Strongly Agree / Very Easy
4.5 ≥ WM ≥ 3.5	Agree/ Easy
3.5 ≥ WM ≥ 2.5	Undecided/ Uncertain/ Neither easy nor difficult
2.5 ≥ WM ≥ 1.5	Disagree/ Difficult
WM < 1.5	Strongly Disagree/ Very Difficult

Normally, Likert scale rating is measured as ordinal (categorical). However, in the context of this study, there are assumptions that the ordinal level ratings approximated interval level scaling. There has been controversy regarding the nature of the data produced by self-reported scales, the method of characterising variables between ordinal and continuous variables is considered as a grey area (Field 2009; Kinnear & Gray 2008). In social sciences, attitudes and feelings cannot be measured with the same precision as pure scientific variables, but self-reported data can be approximated as continuous (interval) and used in parametric statistics (Sharma 1996; Agresti & Finlay 1997; Pallant 2007; Pallant 2011). Blunch (2008) also maintains that by treating the categorical self-reported scales as continuous is realistic if the scales have at least five possible values and the variable distribution is approximating a normal distribution. I ran three types of normality test for both student and teacher Questionnaires 2. Below is one of the samples of each test to show the data from a normal formed distribution. The other two tests, Skewness and Kurtosis and Kolmogorov Smirnov can be seen in Appendix D.

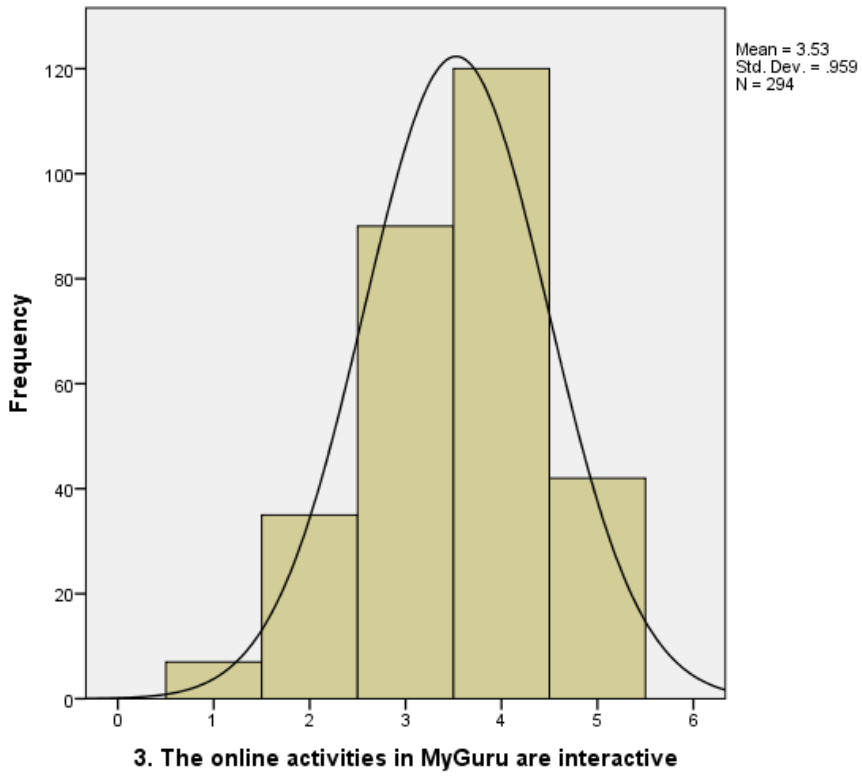

Figure 11: Normality test of Student Questionnaire 2

From the first test, histogram data depict with a lot of 'middle-ground' scores and a few low and high scores. Thus, it can be concluded that the data follow a typical bell shape of univariate normality.

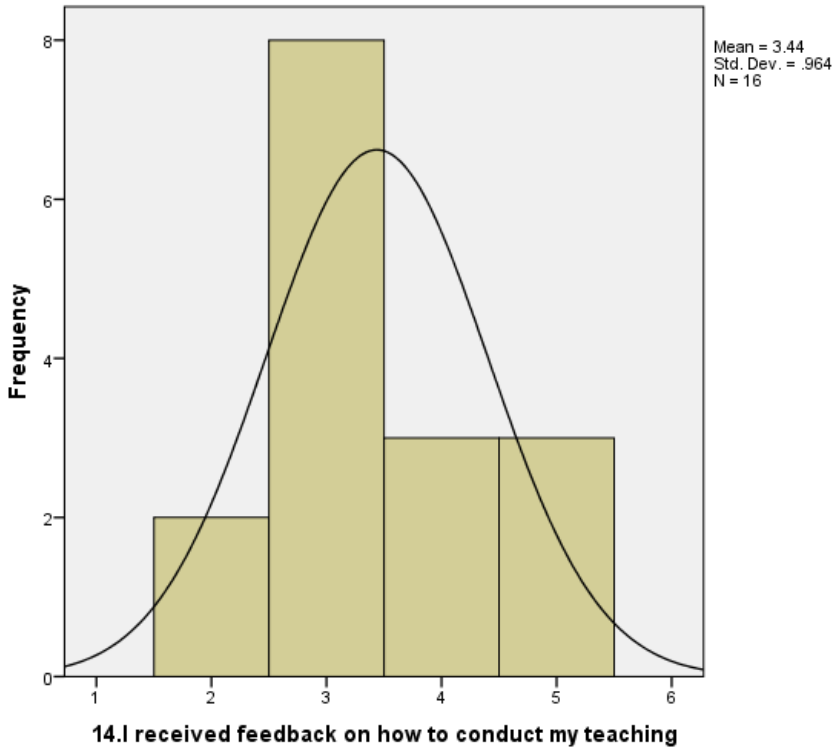

Figure 12: Normality test of Teacher Questionnaire 2

Similar to student Questionnaire 2, histogram data for the teacher Questionnaire 2 depicted with a lot of 'middle-ground' scores and a few low and high scores. Thus, it can also be concluded that the data follow a typical bell curve of univariate normality.

Qualitative Data

In respect to the qualitative data, the interviews were transcribed using Express Scribe. This tool helped me with the transcription of the interviews by giving full control over the audio speed as I played back the recording. After transcribing through Express Scribe, I adopted Atlas.ti, another software that has similar functions as NViVo to help with the coding process. I chose Atlas.Ti because I personally felt it was easier to manage and less complicated as compared to NViVo. Atlas.Ti software was more compatible with my laptop as opposed to NViVo. Unlike Atlas.Ti, NViVo application was often crashed most probably due to incompatible hardware. Due to this, I used Atlas.Ti throughout my study. In addition to that, as I was overwhelmed with the

hundreds of codes developed from Atlas.Ti, I then made use of MS Excel to help with codes reduction (see Figure 7, page 68).

Transcription was an issue because the interviews were a mix of Malay and English. For the teachers, it was mostly in English, and I transcribed the Malay that arose. For the students, there was more of a mix, but I was able to translate as I wrote up the interviews. For MyGuru staff it was more complicated because the staff spoke mainly in Malay. For these interviews, I transcribed the Malay language first and then translated into English.

I started my data analysis by open coding, that is generating a list of ideas associated with each interview. Later, I was able to group those into bigger themes as seen in the next section. Throughout the process, I looked back at my research questions and the kind of data that would help me to address the questions. This process allowed the codes and the themes to emerge from the data, but still within the aims of my study.

As a single coder, I did not have the privilege of having a team of researchers to ensure the inter-coder reliability. Instead, I carried out the process by myself checking my judgement with a colleague who had an interest in a similar area and with my supervisor. After a few cycles of negotiation, we finally agreed on the themes developed from the transcriptions (see Appendix E).

I gave four sets of transcriptions to a colleague. This process is known as "peer checking" which according to Creswell (2012), can help in checking the reliability of the coding process. Over time, we reached 70-80 percent agreement with most of the codes.

Although these measures were taken, I was well aware that this process did not mean that our interpretations were correct, but it was important to do this exercise as a pre-requisite to validity. The comparison from the peer checking was compared, discussed and amended as necessary.

For teacher interviews, I developed a list of 148 codes using an open coding approach. I then grouped the data into 23 possible themes. However, although I had reduced the codes, I still could not manage them. Then, I sorted them into CHAT elements (tool,

subject, object, rules, community, a division of labour and outcomes) and applied these accordingly to each element. This was a mixed of bottom up and top down approaches.

As for the observation, a structured observation schedule was employed together with conventional field notes and a DSLR. Data from the observation were then analysed together with the findings from the survey and the interview. Through the findings, I could explore problems, tensions and contradictions within an activity system and describe BL experiences from CHAT perspectives.

The interpretation of both quantitative and qualitative data in a single study was an attempt to investigate the underlying phenomenon of BL in English Proficiency courses. Both methods were hoped to highlight different aspects of BL from the perspective of activity systems by expanding, strengthening or even exposing the overall process.

Ethical Considerations

When conducting a study involving human participants, the consideration of ethics was taken seriously to ensure compliance with the university's policy. One of the important considerations is data handling and storage. In accordance with the legislative frameworks governing data protection, research ethics and research governance as stated in (previously known as) Research Councils (UK) and now known as UK Research and Innovation, I ensured that I had taken necessary precautions and followed the requirements when collecting and storing my data since the study aimed to describe people's experience and environment through examining and exploring.

I destroyed the hardcopy data from Questionnaires 1 and 2, as soon as I had finished keying in the input on SPSS. All contact details of participants collected as part of the study were also discarded. The remaining data for extensive analysis were stored electronically in the University of Warwick OneDrive and Google Drive as well as an encrypted personal laptop, which meant the laptop could only be accessed by me. These electronic data will be fully demolished once the study has been completed. This is to ensure security and safety of the participants as suggested by Bryman and Bell (2007) and Kimmel (2007).

In respect to participants' rights and dignity, the participants were informed in advance that their information would be kept confidential and anonymous. Teacher participants were coded as S, T, U, V, and so forth while student participants as EP3 student 1 and EP4 student 1 and so on. None of their details were requested. The student participants, however, were encouraged to leave their contact number if they wished to be interviewed.

Consent was also obtained before getting involved in the study. I distributed letters of consent (see Appendix C) to the participants in advance before collecting the data and explained again at the beginning of the first meeting with the participants so that further clarification could be made to those who had queries. I also sought for permission from the Malaysian government as this was a standard of procedure for students who are pursuing their studies abroad. Permission to conduct the study in the university was granted by the Economic Planning Unit in Malaysia and the Centre for Languages and General Studies of the university. A sample of letters of consents are attached in Appendix C.

As regards cultural and religious values, I did not ask any questions about this. I highly respect the multiracial and multi-ethnic people that existed within the university. The use of language was also assessed, making sure that offensive questions were not asked, nor any form of discrimination and disregard perceived. Any form of communication was treated with transparency and honesty. All data were also anonymised.

In terms of researcher competency, as an early researcher at the PhD programme, I had some experience conducting a similar research design when pursuing my master's degree. In addition to that, I had also piloted some of my methods and discussed this with my supervisor to make necessary amendments.

Throughout the study, I also ensured the participants' safety and well-being were safeguarded. Survey data collection was done in the designated room assigned by the university, and for the interview sessions, the participants had set the location themselves, according to their availability. The interviews were carried out in an informal environment to help ease the participants' wariness and anxiety during the process.

Although permission to conduct the research was fully obtained, there was an ethical dilemma that I faced due to a technical issue with regard to observing MyGuru online sessions. Despite having access to MyGuru as one of the lecturers in the university, I could not be assigned to the EP courses due to my status at that time as a member of academic staff who was on study leave. Therefore, the MyGuru officers could not assign me as one of the language instructors of the EP courses.

Concerning the misuse of research, I am confident that my research did not involve any knowledge, materials or technologies that could be channelled into crime or terrorism. My research had nothing to do with any chemical, biological, radiological or nuclear weapons and the means for their delivery, not even developing any technologies for surveillance technologies that could curtail human rights and civil liberties. It did not involve minority or vulnerable groups or develop social, behavioural or genetic profiling technologies that could be misused to stigmatise, discriminate against, harass or intimidate people. I had ensured these very well when designing my proposal through my research aims and objectives. I am certainly positive that my research did not serve any unethical purposes.

When reporting my findings, I ensured that all data were reported accurately. I did not hide any unwanted information. I had also run verifiable methods when proposing, performing and evaluating my research. I adhered to the rules in reporting research results with particular attention to regulation, guidelines and followed commonly accepted professional codes or norms. My research can be accessed by all interested persons to the underlying data, processes, and the final results of my study.

Chapter 4: Surveys

Introduction

This chapter analyses survey data gathered from students and teachers in Questionnaires 1 and 2. Chapter 4 is divided into five sections:

- students Questionnaire 1
- students Questionnaire 2
- teachers Questionnaire 1
- teachers Questionnaire 2
- summary

This chapter starts with describing students' and teachers' demographic data, historical and social background. Then, key data from Questionnaire 2 are presented based on the CHAT elements, and each element is concluded with weighted mean and standard deviation.

Students Questionnaire 1 (Pre-course)

Questionnaire 1 was distributed to a total of 300 students. All students completed the questionnaires in class, so they were a 'captive sample' although they did not need to fill in, but they chose to. From Questionnaire 1, it was seen that the students were aged between 19 to 28 years. Various ethnic groups including Malay, Chinese, Indian, Dusun, Bugis, Kadazan, Murut, Punjabi, Siamese, Sungai, Kayan and Iban were found. Malay was the most common first language spoken with a total of 260 out of 300 participants (87%), followed by Tamil (6%), English (3%), Mandarin (2%) and other languages (2%). This indicated a multilingual composition with Malays dominating.

Table 17: Gender of EP3 and EP4 Students

Students	**Gender**		**Percentage (%)**		**Total**	
	Male	Female	Male	Female	N	%
EP3	54	94	36.5	63.5	148	100
EP4	25	127	16.4	83.6	152	100

As seen in table 17, there were 148 students from EP3 course and 152 students from EP4 course. The majority of students were female.

Table 18: Age of EP3 Students

Students	**Age**				**Total**
	19-21	22-24	25-27	≥28	
EP4	47	98	2	1	148
Percentage (%)	31.7	66.2	1.4	0.7	100

Table 19: Age of EP4 Students

Students	**Age**				**Total**
	19-21	22-24	25-27	≥28	
EP4	72	78	2	0	152
Percentage (%)	47.4	51.3	1.3	0	100

As can be seen in Tables 18 and 19, the students were aged between 19 to 28 years old. From both courses, the majority of students were aged between 22 to 24 years old.

Table 20: MUET Band of EP3 Students

Students	**MUET Band**						**Total**
	1	2	3	4	5	6	
EP3	20	66	52	9	1	0	148
Percentage (%)	13.5	44.6	35.1	6.1	7	0	100

Table 21: MUET Band of EP4 Students

Students	**MUET Band**						**Total**
	1	2	3	4	5	6	
EP4	8	85	11	44	4	0	152
Percentage (%)	5.3	55.9	7.2	28.9	2.6	0	100

From Table 20 and Table 21, it can be seen that students' English levels varied from band 1 to band 5. In the EP3 class, the largest group of students obtained Band 2 and in the EP4, this was also the case. However, the EP4 students had a higher level of English for example, 29% in the Band 4.

Table 22: Years of English Studied by EP3 Students

Students	Year of Studied English				Total
	1-5	6-10	11-15	>16	
EP3	2	7	70	69	148
Percentage (%)	1.4	4.7	47.3	46.6	100

Table 23: Years of English Studied by EP4 Students

Students	Year of Studied English				Total
	1-5	6-10	11-15	>16	
EP4	3	9	42	98	152
Percentage (%)	2.0	5.9	27.6	64.5	100

Tables 22 and 23 revealed that 279 out of the 300 students had been learning the English language for more than ten years. This is consistent with the picture of English teaching in Chapter 1. Furthermore, English was a compulsory subject for every student as a requirement for the university entrance.

Table 24: Proficiency Level of EP3 Students

Students	Proficiency Level						Total
	Beginner	Elementary	Pre-Intermediate	Intermediate	Upper Intermediate	Advanced	
EP3	34	39	38	34	2	1	148
Percentage (%)	23.0	26.4	25.7	23.0	1.4	0.7	100

Table 25: Proficiency level of EP4 Students

Students	Proficiency Level						Total
	Beginner	Elementary	Pre-Intermediate	Intermediate	Upper Intermediate	Advanced	
EP4	8	33	38	39	27	7	152
Percentage (%)	5.3	21.7	25.0	25.7	17.8	4.6	100

From Tables 24 and 25, with relation to proficiency level between the two courses, the modal group of EP3 students considered themselves at an elementary level of English language while the modal group EP4 students considered themselves as intermediate users.

Table 26: Hours spent per week on activities involving English language outside the class by EP3 Students

EP3	1-5 hours	>6 hours
Browsing website	53	95
Watching TV, videos.	60	88
Listening to music	67	81
Playing computer games	80	68
Having fun	88	60
Text chatting	91	57
Talking to friends	95	52
Preparing quizzes	101	47
Shopping online	102	46
Doing homework	109	38
Voice chatting	113	35
Writing Email	119	29
Listening online	124	24

Most EP3 students spent a fair amount of time exposed to English through activities in a week. The highest hours spent in more than 6 hours column was browsing website, followed by watching TV, video as well as listening to music.

Table 27: Hours spent per week on activities involving English language outside the class by EP3 Students

EP4	1-5 hours	>6 hours
Text chatting	43	108
Preparing quizzes	44	107
Having fun	45	105
Playing computer games	85	66
Listening to music	90	61
Voice chatting	90	61
Watching TV, videos.	96	55
Shopping online	99	52
Browsing website	100	51
Talking to friends	107	44
Writing Email	123	28
Doing homework	124	27
Listening online	127	23

There was a different pattern for EP4 students. Unlike EP3, EP4 students spent most of their time text chatting, preparing quizzes and having fun.

Students Questionnaire 2 (Post-course)

Students Questionnaire 2 findings are divided into CHAT elements: tool; subject; rules; division of labour; community; and outcomes.

Tools

Table 28: Tool Element (Students Questionnaire 2)

Tool	SD	SWD	NAND	SWA	SA	WM	SD
17. Slow internet connectivity is a problem to access MyGuru	9	11	9	53	212	4.52	.952
31. I had easy access to MyGuru	6	36	58	132	62	3.71	1.00
3. The online activities in MyGuru are interactive	7	35	90	120	42	3.53	.959
35. The use of MyGuru allows me to use other different computer programs too	7	37	78	140	32	3.52	.930
31. There were varieties forms of activities on MyGuru	11	44	90	122	27	3.37	.972
19. MyGuru materials were not well organised	24	72	90	85	23	3.04	1.08

From Table 28, under the **tool** element, the majority of students strongly agreed that slow internet connectivity was a major obstacle. Despite that, they also agreed that they had easy access to MyGuru which meant they could access it either from computer or smartphone. They also agreed the design of the online activities on MyGuru was interactive and they could access MyGuru with other computer programs too. However, they they were uncertain whether MyGuru had offered a variety of activities and the organisation of the learning materials on MyGuru was also questioned.

Subject

Table 29: Subject Element (Students Questionnaire 2)

Subject	SD	SWD	NAND	SWA	SA	WM	SD
1. I have sufficient skills to use MyGuru	9	6	32	157	90	4.06	.878

Table 29 shows that most students agreed that they possessed sufficient skills to operate MyGuru.

Rules

Table 30: Rules Element (Students Questionnaire 2)

Rules	SD	SWD	NAND	SWA	SA	WM	SD
28. The teacher pointed out the learning objectives clearly at the beginning of the class	2	16	68	148	60	3.95	1.89
29. The teacher uploaded sufficient learning materials on MyGuru	5	22	53	139	75	3.87	.935
10. Tasks given in MyGuru and f2f instructions were clear	3	24	59	145	63	3.82	.896
37. I was aware of the rules in using MyGuru	7	22	59	167	39	3.71	.875

Table 30 shows that students agreed that the teacher had pointed out the learning objectives clearly at the beginning of the class and that there were sufficient learning materials uploaded by the teachers. The instructions for tasks given in the classroom and on MyGuru were also clear. In regard to the rules, students agreed that they were aware of the rules in using MyGuru. The rules here referred to the obligation to integrate MyGuru in their learning such as completing the assignments on MyGuru, taking part in the forum discussion and also attempting online quizzes or tests.

Division of Labour

Table 31: Division of Labour Element (Students Questionnaire 2)

Division of labour	SD	SWD	NAND	SWA	SA	WM	SD
24. I did equal tasks distributions for the group assignments	5	11	61	164	53	3.85	.818
22. I participated actively in classroom discussion	1	25	81	141	46	3.70	.846
1. I collaborated with my peers in MyGuru activities	5	25	75	156	33	3.64	.855
26. I received feedback from my peers on MyGuru	13	36	86	129	30	3.43	.918
23. I did not participate actively in MyGuru discussion	20	69	76	87	42	3.21	1.16

Table 31 illustrates that students agreed that they performed equal task allocation with their groupmates; participated actively in the classroom discussion; and collaborated with friends on MyGuru. Nonetheless, they were uncertain about the statement that they received feedback from their peers regarding their assignments and activities conducted on MyGuru and whether to rate their participation on MyGuru as active. The confusion could be because most of them had taken part in the MyGuru discussion but did not consider it as active as the classroom discussion.

Community

Table 32: Community Element (Students Questionnaire 2)

Community	SD	SWD	NAND	SWA	SA	WM	SD
13. I got the technical support I needed during this course	2	31	82	148	31	3.60	.840
27. I received feedback for my classroom assignments from	7	34	78	149	26	3.52	.896

Community	SD	SWD	NAND	SWA	SA	WM	SD
my teacher							
30. The teacher took part during the online activities	10	40	93	116	35	3.43	.981
38. Getting technical support was easy	11	31	102	121	29	3.43	.938
2. The university provided MyGuru training for students	7	35	9 0	120	42	3.41	1.19
33. I received feedback from a teacher of my activities on MyGuru	12	42	101	115	24	3.33	.958
32. I attended MyGuru training provided by the university	41	49	75	100	29	3.09	1.21
20. The teacher was not available for the activities in MyGuru	22	63	108	75	26	3.07	1.06
18. My teacher did not reply my queries	27	65	121	51	30	2.97	1.08

Table 32 shows that students agreed that they received technical support from the MyGuru support staff throughout the EP course and from teachers in terms of giving feedback on the classroom assignments. However, students were uncertain whether their teachers had taken part in the MyGuru activities either maybe because they had not posed any inquiries themselves. In terms of getting technical support, students were undecided whether they had easy access to the support or not, most probably because they had not requested for one. They were also uncertain whether the university had provided any MyGuru training for them; whether they received feedback from teachers with regard to activities they carried out on MyGuru; or attended training on MyGuru. They also undecided whether teachers were available during the online activities or received reply to their queries from their teachers online.

Outcomes

Table 33: Outcomes Element (Students Questionnaire 2)

Outcomes	SD	SWD	NAND	SWA	SA	WM	SD
7. The integration of MyGuru and f2f instructions was useful	1	18	73	158	44	3.77	.789
12. The online and classroom activities worked well together.	3	30	67	136	58	3.73	.926
14. The combination of MyGuru and classroom lecture gave me enough time to do my tasks.	4	18	81	142	49	3.73	.859
9. The integration of MyGuru and f2f instructions enhanced the interaction between students and teachers	0	25	87	135	47	3.69	.839
36. The combination of MyGuru and f2f instructions helped me to master the learning content.	0	17	89	155	33	3.69	.745
5. Learning using MyGuru and f2f instructions was easy	1	22	86	145	40	3.68	.813
40. The structure of the MyGuru and f2f environment keeps me focused on what was to be learnt.	2	20	91	138	43	3.68	.830
8. The use of MyGuru with classroom instructions was interesting	4	24	90	127	49	3.66	.898
10. There was a good	3	35	76	129	51	3.65	.937

Outcomes	SD	SWD	NAND	SWA	SA	WM	SD
balance between MyGuru and classroom activities							
15. I would like my other English courses to be taught with the combination of MyGuru and f2f instructions.	7	25	79	139	44	3.64	.920
34. I achieved my learning goals from this course.	6	21	82	150	35	3.64	.859
16. I learned more with the integration of MyGuru and f2f instructions.	1	25	99	134	35	3.60	.819
39. I felt a sense of satisfaction and achievement about the integration of MyGuru and f2f learning environment.	2	19	104	138	31	3.60	.789
4. I was able to improve my English skills through the use of MyGuru and f2f instructions	11	43	112	99	29	3.31	.966
20. The combination of MyGuru and f2f instruction was frustrating to use.	21	85	114	62	12	2.86	.966

Table 33 shows students saw impacts on their learning. Students rated the BL approach as useful, easy and interesting. They agreed that the online and classroom activities worked well and allowed them to have plenty of time to complete their tasks. Students further rated BL as a method that could enhance interaction between peers and teachers, helped them focused in learning, and there was a good balance between MyGuru and classroom activities. Not only that, students agreed they preferred more

courses that adopted similar blended methods because BL had helped them achieved the learning goals of the EP course and made them learned more. They felt satisfied with the positive impacts that BL had on their learning environment.

However, when specific questions were asked about the language learning outcomes, students were uncertain whether these modes had helped them improved their English skills (speaking, listening, reading and writing) or not. They also undecided either the use of BL was frustrating. Overall, the most important gist was that students conveyed a sense of satisfaction and achievement about the integration of BL

Teachers Questionnaire 1 (Pre-course)

Questionnaires 1 and 2 were distributed to a total of 16 language teachers at the institution. Similar to students, teachers Questionnaire 1 asked about their demographic, social and historical background.

Of all language teachers, nine were female and seven others were male. Their ages ranged from 24 to 53 years old. 12 of the respondents had Malay as their first language; two Tamil, one Mandarin and another one Punjabi. Most teachers had 6 to 10 classes in a semester. In each classroom, the total number of students was usually between 40 to 50. A further breakdown of the data is as follows:

Table 34: Education Level of Teachers

Level of Education	Frequency (N)	Percentage (%)
Degree	11	68.8
Masters	5	31.3
Total	16	100

Table 35: Years of Teaching Experience

	< 1 year	1-5 years	6-10 years	>11 years	Total
Frequency (N)	2	5	8	1	16
Percentage (%)	12.5	31.3	50.0	6.3	100

Table 36: Hours Spent in Teaching per Week

	Hour(s)				Total
Task	1-5	6-10	11-15	>16	
Teaching	5	2	3	6	16
Preparing	8	5	3	0	16
Marking	7	6	2	1	16
Online presence in MyGuru	13	1	1	1	16

From Table 34, 11 of the language teachers were bachelor's degree holders while five were masters' degree graduates. In Table 35, most of the language teachers (eight people) had six to ten years of teaching experience, and more than half could be considered as experienced teachers in regard to teaching English. Table 36 shows that 6 of them had more than 16 teaching hours per week. Considerable hours also spent in preparing, marking and online presence in MyGuru. The teaching hours distribution was not equal due to the different positions assumed at the language centre. For instance, if a language teacher was in an administration position, teaching hours were fewer. In other instances, the teaching hours for each semester differed.

Table 37: Number of Classes Taught per Semester

	Number of classes			Total
	1-5	6-10	11-15	
Frequency (N)	2	12	2	16
Percentage (%)	12.5	75.0	12.5	100

Table 38: Teachers Use of BL

Use of BL	Yes	No	Total
Frequency (N)	15	1	16
Percentage (%)	93.8	6.3	100

As can be seen in Tables 37 and 38, the majority of language teachers taught between 6 to 10 classes per semester. All but one of them used BL in teaching. The teachers described using online assessments such as online quizzes, forum, and group discussions. They also utilised online materials such as documents, videos, exercises for teaching and learning input.

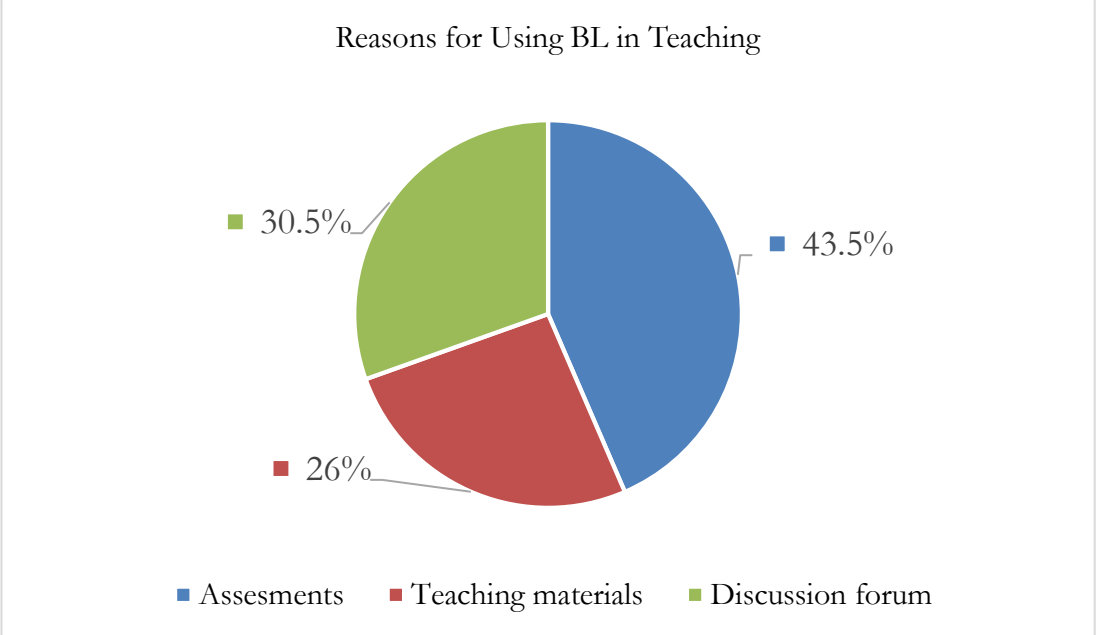

Figure 13: Reasons for Using BL in Teaching

Data gathered from the open-ended item fell into three major reasons of using BL (Figure 11). The most common was for the online assessment such as self-access quizzes and tests including assignment submission. The second was for the online discussion forums and the third was for distributing teaching materials in terms of notes (Word, PDF, PPT) and link to videos.

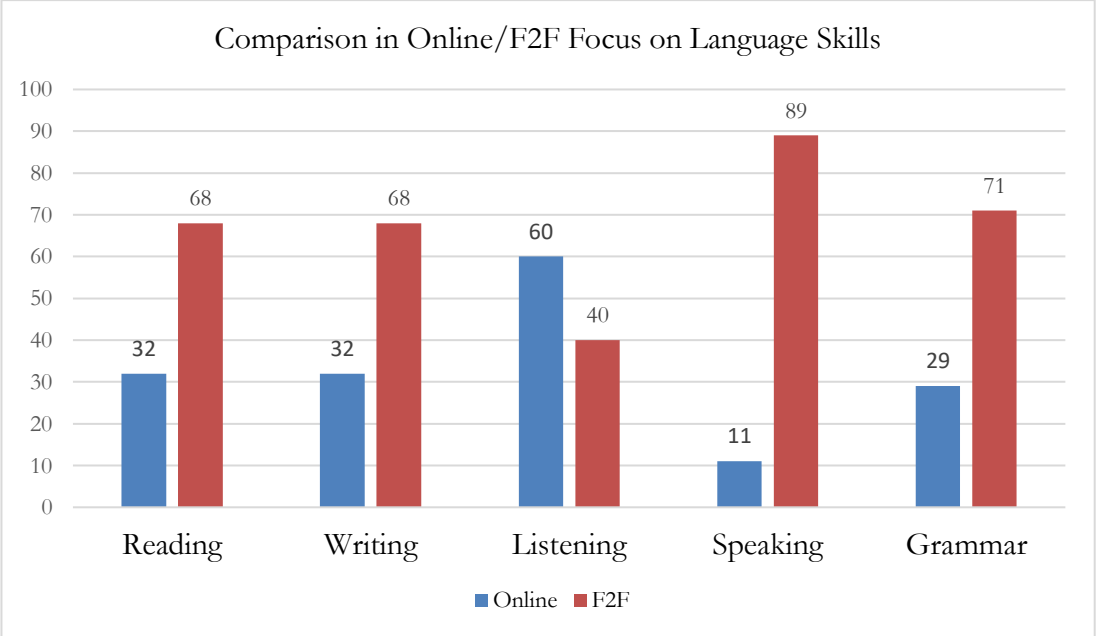

Figure 14: Teaching Language Skills

The bar chart in Figure 12 shows the teaching skills typically covered by the teachers in online and f2f contexts. As can be seen, most teachers focused on f2f. However, there was a greater focus in online listening skills pointing to the resources available. There was not much of opportunity with speaking in online context.

Teachers Questionnaire 2 (Post-course)

Questionnaire 2 is also organised according to these CHAT elements: subject; rules; division of labour; community; and outcomes.

Subject

Table 39: Subject Element (Teachers Questionnaire 2)

Subject	SD	SWD	NAND	SWA	SA	WM	SD
1. I felt pedagogically prepared to teach this course.	0	1	1	9	5	4.13	.806
7. I felt technically prepared to teach this course.	1	1	1	10	3	3.81	1.05
1.0 My teaching style matches well with BL.	0	0	5	9	2	3.81	.655

From Table 39, teachers felt pedagogically and technically prepared to teach the course. They also said that teaching using BL had matched their teaching style. These statements show a good degree of readiness to take on the use of MyGuru and classroom instruction.

Rules

Table 40: Rules Element (Teachers Questionnaire 2)

Rules	SD	SWD	NAND	SWA	SA	WM	SD
21. I explained the course rules and regulations to students at the beginning of the course.	0	0	0	6	10	4.63	.500
25. I followed the course organisation as stated in the course	0	1	0	10	5	4.19	.750

Rules	SD	SWD	NAND	SWA	SA	WM	SD
guidelines.							
23. I followed the guidelines provided by the university when implementing BL.	0	0	5	5	6	4.06	.854

From Table 40, teachers strongly agreed that they had explained the course rules and regulations to the students when the course started and agreed that they had followed the course organisation and guidelines as set by the university. This shows a high degree of compliance with the university expectations.

Division of Labour

Table 41: Division of Labour Element (Teachers Questionnaire 2)

Division of labour	SD	SWD	NAND	SWA	SA	WM	SD
22. I encouraged students to participate in BL activities.	0	0	0	6	10	4.63	.500
17. I discussed with my colleagues regarding the teaching materials.	0	0	3	8	5	4.13	.719
20. I consulted with my course coordinator regarding the activities on MyGuru and in the classroom.	0	0	4	7	5	4.06	.772
35. Managing the classroom activities was…	0	0	3	9	4	4.06	.680
3 I made an effort to integrate classroom and online activities with each other.	1	1	0	10	4	4.00	.966
24. I worked together with other colleagues when designing the course activities.	0	2	3	5	7	3.94	1.06
18. I acted as a facilitator in MyGuru.	0	2	3	7	4	3.81	.981
19. I did not interact with	0	3	3	7	3	3.63	1.03

Division of labour	SD	SWD	NAND	SWA	SA	WM	SD
students in MyGuru and only monitored them from afar.							
35. Managing the online activities was…	4	5	4	4	3	3.38	1.09

From Table 41, teachers strongly agreed that they had encouraged students to participate in the BL. They also agreed that they had discussed matters with their colleagues and course coordinator regarding the teaching materials and course activities. They rated their experience in managing the class as easy. Therefore, they managed to put their effort in combining the f2f and online activities together. In helping them doing this, they agreed they had discussed with their colleagues with regard to designing the activities. On top of that, teachers also agreed they assumed more of a role as facilitator and only monitored students' engagement from afar and did not make any interaction with the students online. However, teachers were uncertain on how to rate their experience in managing online activities. In short, there was a balance in terms of task distribution for the teachers themselves as well as among their colleagues.

Community

Table 42: Community Element (Teachers Questionnaire 2)

Community	SD	SWD	NAND	SWA	SA	WM	SD
28. The university monitored the activities in my BL course.	0	2	2	10	2	3.75	.856
2. I received the BL pedagogical support I needed during the course.	0	2	6	5	3	3.56	.964
8. I received the technical support I needed during this course.	1	3	1	8	3	3.56	1.21
14. I received feedback on how to conduct my teaching.	0	2	8	3	3	3.44	.964
26. The university has provided training for the BL implementation.	0	5	3	5	3	3.38	1.15

Community	SD	SWD	NAND	SWA	SA	WM	SD
36. Getting technical support was….	2	1	6	6	1	3.19	1.11
27. I attended the BL training sessions.	2	5	2	5	2	3.00	1.32

From Table 42, teachers agreed the university had monitored their engagement in BL. they also agreed that they received pedagogical and technical support throughout the course. However, teachers were undecided whether they received feedback on their teaching conduct and whether the university had provided training to use BL or had attended any training sessions. In a question on technical support, teachers rated this procedure as neither easy nor difficult. In general, teachers said they had received the necessary support in relation to the BL implementation although there were uncertainties on some issues.

Outcomes

Table 43: Outcomes Element (Teachers Questionnaire 2)

Outcomes	SD	SWD	NAND	SWA	SA	WM	SD
3. I had enough influence on the course contents and activities.	0	0	2	9	5	4.19	.655
10. I would like to teach other ESL courses using BL.	0	0	1	11	4	4.19	.544
30. The classroom activities were successfully executed.	0	0	1	11	4	4.19	.544
16. I managed to meet the learning objectives at the end of the course.	0	0	4	7	5	4.06	.772
31. The MyGuru activities were successfully executed.	0	0	2	11	3	4.06	.574
32. Students were more active during the classroom activities.	0	1	4	5	6	4.00	.966
13. The classroom activities worked	0	1	2	10	3	3.94	.772

Outcomes	SD	SWD	NAND	SWA	SA	WM	SD
well.							
29. I found students had actively participated during MyGuru activities.	0	1	3	10	2	3.81	.750
34. I prefer classroom activities more than MyGuru activities.	0	2	7	4	3	3.75	.856
4. There was a good balance between online and classroom activities.	1	1	4	7	3	3.63	1.09
5. The online and classroom activities integrated well.	1	2	2	8	3	3.63	1.15
12. The online activities worked well.	1	1	2	11	1	3.63	.957
35. Integrating the online and classroom activities was…	2	0	7	4	3	3.50	.966
33. Students were more active during the MyGuru activities.	1	0	8	6	1	3.44	.727
15. I did not face any difficulties while teaching in MyGuru.	3	2	5	5	1	2.94	1.24
9. Using BL did not make this course more demanding to teach.	1	6	7	2	0	2.63	.806

From Table 43, teachers agreed that they had enough influence on the course contents and activities which had made them like to teach other ESL courses in the BL mode. In particular, teachers agreed that they managed to successfully execute f2f activities slightly better than the online activities. Thus, contributed to the achievement of their learning goals at the end of the course. Teachers said that their students were active in their lesson but slightly more active in classroom activities as compared to online. This showed that the classroom activities worked well than the online. Although teachers wanted to have more BL mode, but they still preferred to have more classroom

activities than online activities most probably because students were more responsive in the classroom. This, however, does not mean the online activities did not work well, because the teachers agreed that the combination of online and classroom activities integrated well.

However, teachers rated their experiences in integrating both f2f and online modes as neither easy nor difficult. They were also uncertain whether their students were more active in MyGuru activities and whether teaching using BL was not demanding, which implied that teaching BL might be quite challenging for some.

Summary

In summary, finding from Questionnaire 1 for both students and teachers showed that they were from varying background with Malay as the major ethnic. Female students and teachers were the dominant gender in the EP courses and among the teachers. It was once again confirmed that most students experienced more than 11 years of learning English, yet many still struggled to achieve intermediate proficiency level, as shown in the MUET band and self-rated perception. There was active engagement with technology for both academic and non-academic purposes.

Findings in Questionnaire 2 showed that all of the students and teachers had a fairly positive view of the use of technology, in this context, MyGuru. The tool offered affordances such as easy use and access for interactional resources for learning with some limitations in terms of connectivity. There were some rules that students and teachers had to adhere to, and they were aware of their own rules in terms of task distribution and classroom participation. Both students and teachers received sufficient support on the use of MyGuru. Different kinds of outcomes were also seen from students and teachers with the overall satisfaction and a sense of achievement about the integration of the BL approach. Now, I turn to Chapter 5 that will present data from observations.

Chapter 5: Observations

Introduction

This chapter analyses survey data gathered from f2f and online archive observations of EP3 and EP4 courses. Chapter five is divided into three sections:

- f2f observations
- online screen captures observations
- summary

F2F Observations

I observed two classes at my research site: EP3 and EP4. My role was a non-participant observer. I adopted this role as the classes were not mine and I wanted to avoid inappropriate involvement in the course activities. To help me record the events, a video recorder was used (with permission) in each session. I also carried out conventional note taking.

I needed a schedule to enable me to record my observations (see Chapter 3: Methods and Methodology). My aim in carrying out an observation was to give a flavour of a classroom and to see see whether the idea of BL had taken root. I observed EP3 course for five times and EP4 course for four times (see Table 12). Below are my composite descriptions of the classes.

EP3 F2F observation

Table 44: EP3 Observation Findings

Focus	Description
Physical setting	• The lessons were conducted in a big auditorium hall, theatre seating with a capacity of 300 students at a time. There were 51 students for the EP3 course of the current semester. The fixed stadium chairs were made from high quality material (black and yellow), and the seating came with a customised table for writing. At the front, there was a stage, and on the stage, there was a big table with a computer, LCD projector, LCD screen (movable), a microphone, two speakers, two metal cupboards, one technical box, a whiteboard and a speech podium. The atmosphere was cold as the room was airconditioned and only 1/6 of the auditorium was occupied with the students of the course (51 people). • There were five exit doors in the hall. The hall was equipped with an attendance reader whereby students were required to scan their student card at the card reader machine.
Participation	• A teacher-centred approach was adopted. In all lessons, V was the one who did most of the talking and asked questions usually addressed to the whole class. However, most of the time, students seemed to sit and listened to V. At times, group tasks were given, which involved pair work or group work. Students were allowed to ask questions. However, students in the back rows were a long way from the teacher and were less likely to ask. For the most part, students looked like they were paying attention, and there was little evidence of off task activity. However, when there was group discussion where V divided them into groups, students managed to discuss among themselves either by sitting in a 2x2 or 1x4 arrangement. Students in the back rows were a long way from the teacher. Not all students occupied the front rows. So, the dispersion ratio was imbalanced because the hall was too big for only 51 people.

Focus	Description
Roles	Students • Most assumed a passive role. They listened to V and were expected to respond when V prompted. Some were seen not to give full attention, playing with their phone and laughing and dozing in between the lessons. • However, during the group activities, students seemed to be more active by discussing with their teammates. However, most of the discussion was in their mother tongues although the course was about learning English. Students asked questions to V. Students seemed to give full cooperation when they were required to present in front of the class. Teacher • V started the lessons by dividing the students into groups. After introducing a topic, V used the computer and whiteboard to explain the lessons further. The teacher asked students to present in front of the class after a group discussion. During the discussion, the teacher circulated group by group asking for questions and answers. V explained in Malay when students seemed confused with his explanation. By having bilingual explanations, they were seen to cope better.
Record exact quotes or close approximations of comments that relate directly to the purpose of the study.	• "I will upload this in MyGuru as usual." • "That is why you have to join the forum. If you have joined in, I'm sure you can understand today's topic: this time past tense". • "I tried to do the listening but couldn't. The system is not working."
The shape of the lesson	• The shape of most lessons was 'linear'. Beginning • For the beginning, V usually started the class by reviewing homework or recapping the previous lesson and set the target for the lesson. A new topic would be introduced in the form of notes and examples. Middle • V then asked the students to do exercises in the learning module based on the examples given.

Focus	Description
	Together they discussed the answers. End • V and students reviewed and summarised the lesson and what was learned for that day. Homework was assigned to the next meeting.
Impressions	• If you looked at these lessons without having been a teacher, you would notice the strict-hierarchy where the teacher held full authority in the classroom. In this situation, students were expected to listen while the teacher talked. There were no explicit rules about this condition, but the students appeared to know how to behave without being told. With regard to the classroom design, students did not have adequate space to move freely. Their personal space was limited to one seat. • In terms of Cultural-historical Activity Theory perspective, it can be seen that the teacher had an **object** to deliver the topic for that day and completed the learning module or textbook at the end of the semester. • In respect to the **tool** in the classroom, the whole experience was geared by the learning module or textbook and the instructional plan (curriculum). The computer, LCD projector and microphone were also used as a medium to deliver the lessons. Since the hall was spacious, the use of microphone was needed in order to reach students at the back row. There was a **division of labour** between the teacher and the students, in particular, a class representative. The class representative was a person who had been assigned a special role in helping the teacher to manage the course regarding classroom attendance as well as notification related to the course. Other tasks included the notification of class cancellation and the sale of EP3 learning textbook. • There was also a division of labour between teacher and support staff. Before coming to the class, the teacher expected the facilities to be in working order.
Use of technology	• V consistently relied on PowerPoint slides while

Focus	Description
	teaching and activities were mostly done in the learning module.
Unanswered questions	• How has MyGuru impacted the learning in general? • Online observation could answer my curiousity.

EP4 f2f observation

Table 45: EP4 Observation Findings

Focus	Description
Physical setting	• The lesson was conducted in an airconditioned classroom with a capacity of 60 students. The number of students of the EP4 course was 50 for that semester. S was standing in front while students were sitting in rows facing the teacher. The tables and chairs were movable and not fixed in one position. The tables were made from wooden materials while the classic classroom chairs were made from royal blue fabrics. Both were stackable for space efficient storage. Although the tables and chairs were movable, S did not change the layout of the room which was organised in rows. However, during a debate session (4th observation), tables and chairs were brought in to resemble a parliamentary debate where they were facing each other. • In front of the class, there was a big whiteboard on the wall, one movable whiteboard at the side, two speakers, one at each corner of the class, a speech podium at the right corner that was equipped with a microphone. There was also a LCD projector ceiling mount wall that could be used with a computer, keyboard and mouse inside the speech podium. S used the whiteboard most of the time and only once used the computer to show a video clip of a debate as a model for an activity. • Before the class began, a couple of students were already waiting in the room. The way they dressed suited a hot climate country, lightweight clothing.
Participation	• A teacher-centred approach was adopted. S was

Focus	Description
	the one who did most of the talking and asked questions usually addressed to the whole class. However, most of the time, students seemed to sit and listen to S. At times, group tasks were given, which involved pair work or group work. Students were allowed to ask questions. However, students in the back rows were a long way from S and were less likely to ask. For the most part, students looked like they were paying attention, and there was little evidence of off task activity.
Roles	Students • Most assumed a passive role. They listened to the teacher and were expected to respond when the teacher prompted. Teacher • S usually started the lessons by recapping what they had done the previous week. Then, S told the students to take out their learning module or textbook and explained the kind of exercises they would do for that day, explaining grammar and vocabulary. After brainstorming some ideas, S delegated the learning module tasks using a mix of individual, pair, and group work. S told students to use their mobile phones in searching for information related to the lesson. During this phase, S would monitor the students doing the activities by circuiting the classroom and attending to queries. In one example, S's attention was dominated by one group, and my impression was the other groups were unable to get the help they needed. Although it was an English course, students communicated in Malay most of the time.
Record exact quotes or close approximations of comments that relate directly to the purpose of the study.	• In two lessons, S referred to MyGuru. First to remind them that notes were uploaded on MyGuru. Second, to explain how it could explicitly help in their learning. For example, in observation three the teacher said "I have given you the notes on MyGuru, the abbreviations and everything. – S had uploaded the notes on MyGuru before the class. So, students were expected to understand the abbreviation used in

Focus	Description
	the clips explaining how the debate was done.
The shape of the lesson	• The shape of most lessons was 'linear'. Beginning • For the beginning, S usually started the class by reviewing homework or recapping the previous lesson and set the targets for the lesson. Middle • S then explained the exercises and asked the students to complete them. There was also a session where students debated a given issue (transgender issues, economic issues). End • S and students reviewed and summarised the lesson and what was learned for that day. Homework was assigned for the next meeting.
Impressions	• Again, the teacher held full authority in the classroom. In this situation, students were expected to listen while the teacher talked. There were no explicit rules or clear unwritten rules. The students appeared to know how to behave without being told. With regard to the classroom design, students did not have adequate space to move freely. Their personal space was limited to one seat. • In terms of Cultural-historical Activity Theory perspective, it can be seen that teacher had an **object** to ensure students had completed the assigned homework, to introduce and learn new topic for the day and completed the activities for the newly taught lesson. • In respect to the **tool** in the classroom, the whole experience was geared by the learning module or textbook and the instructional plan (curriculum). Having the textbook and instructional plan both in hard and softcopy provided structures, activities and shaped most of the lesson. The computer and projectors were used to help deliver the lesson but did not have the organising role. The whiteboards were in constant use whenever the teacher wanted to make a clarification on the lesson. The microphone was not in use because the teacher's voice was loud enough to be heard at the back

Focus	Description
	of the class. • There was a **division of labour** between the teacher and the students. A special role was given to the class representative. The class rep had tasks such as monitoring attendance for the teacher and helped pass down any information regarding the course. • There was also a division of labour between teacher and support staff. Before coming to the class, the teacher expected the facilities to be in working order.
Use of technology	• During the second observation, S asked her students to use their smart phones to browse information on landmarks in Malaysia and Singapore. • S showed examples of good debate recording on YouTube. Lights were switched off during this session.
Unanswered questions	• Some of the unanswered questions that still lingered on my mind: Can the learning of EP4 students provide a good learning experience for them? Students were generally engaged at some point, but some still seemed to have a much lower level of English than the term advanced suggested. They looked to me like they could only follow the exercises at a very superficial level. • My other question was: Was the existence of MyGuru changing the lesson in any way? Was MyGuru making a difference? (I had to compare with MyGuru sessions) • I wonder how students were accepted in the EP4 class (the procedures). • I wonder how the students could pass the previous level with such quality? • EP4 students struggled to pronounce certain words and grammar. The advanced level did not seem to fit the students in the course.

Online Screen Captures Observations

EP3 Online Archive

In terms of types of use, **V** had used MyGuru for making general announcements regarding the course; setting up group forums for online discussion and essay writing; creating an online assessment to support mid-term revision; uploading course materials/lecture notes, and reporting week eight monitoring points and learning evaluation.

With regards to making an online announcement, **V** normally informed the students of the next activities that should be completed online on that platform. There was a due date given for each task, which might come later than the next f2f class. An example is provided below:

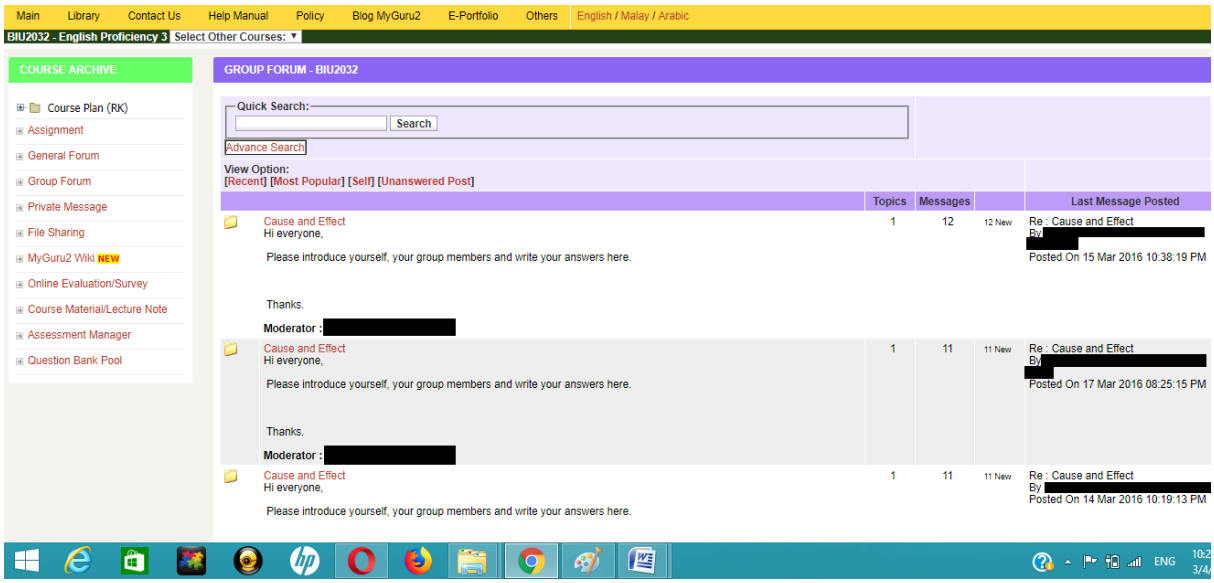

Figure 15: EP3 General Announcement of MyGuru Interface

In another example, **V** asked his students to carry out a group online writing essay on the group forum link. The online writing activity was in addition to the written essay they had done in the class. The task was distributed to each group of 4 or 5 students working as a team. For this task, the essay length was 500 to 1000 words, then I later learned from the interviews that students divided the task among themselves. They produced their essays more in cooperation rather than collaboration. From the printouts, I could see that only five groups submitted their essays, which consisted of 39 students out of the 51 who had taken part in the MyGuru essay activity.

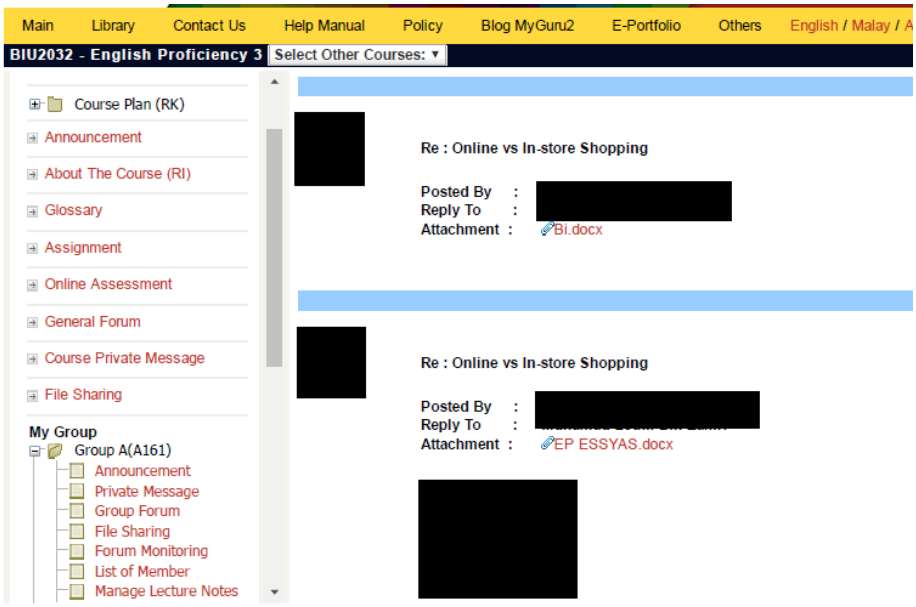

Figure 16: EP3 Forum Discussion of MyGuru Interface

In respect to course materials/lecture notes, there were different formats of documents that could be uploaded on MyGuru: PDF; Word; and Power Point. **V** usually uploaded his PPT presentations, for example covering different essay types: argumentative, cause and effect, compare and contrast formats, introduction and conclusions. Additionally, he also uploaded notes on grammar in PDF or PPT formats, for example, lecture notes that covered adverbs, adverbial phrase and adverbial clause.

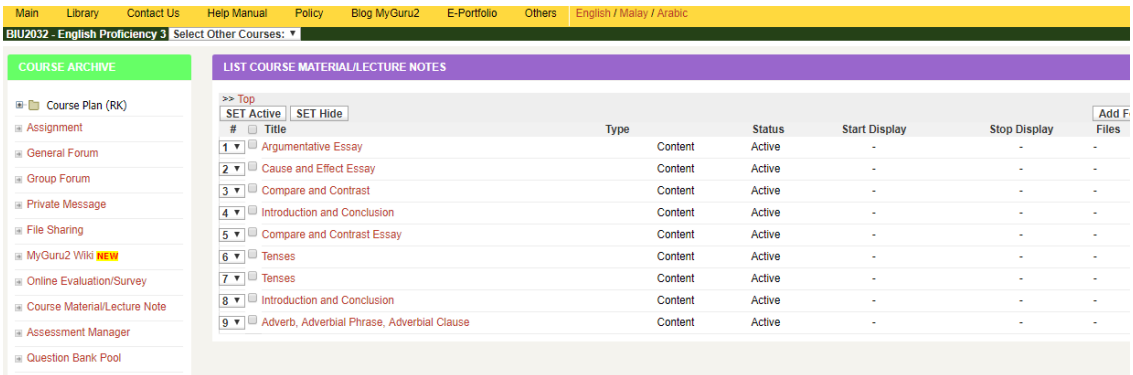

Figure 17: EP3 Course Teaching Materials of MyGuru Interface

As for the creating online assessment for test revision, **V** focused more on grammar exercises which he created. The questions were constructed as MCQs (other formats were possible). Each time a student retook a test, the same questions were presented in a different order to disrupt using learnt answers. The test was for formative feedback

only, and the summative test was taken in the class. It was possible to set the summative online, but the teachers did not do that.

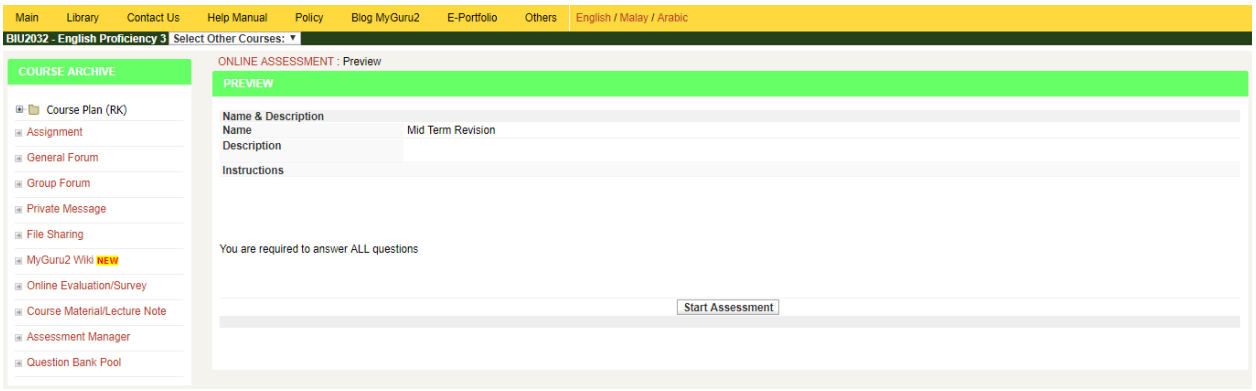

Figure 18: EP3 Online Assessments of MyGuru Interface (A)

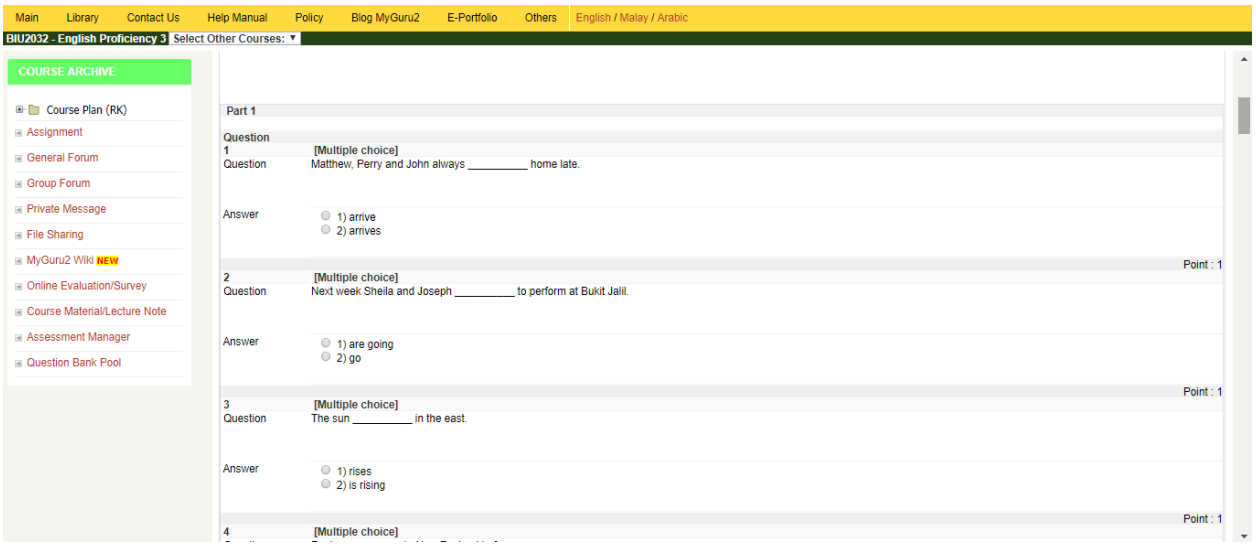

Figure 19: EP3 Online Assessments of MyGuru Interface (B)

V also used a monitoring function which was compulsory for each teacher to complete during the 8th week. The monitoring feature consisted of a link to an online form covering attendance, academic performance and 'soft skills': report and analysis; corrective action and preventive action. There he filled in and clicked submit, thus sending the form to the university afterwards. The form aimed to identify problems in terms of attendance, academic performance and soft skills. It was hoped that appropriate measures could be taken to address any of the problems raised. The teacher

would then receive a review from his head of department together with the status of his report (satisfactory, unsatisfactory).

EP4 Online Archive

I had found a similar restriction as the EP3 course. I could not get direct access to MyGuru. Thus, I had to ask the EP4 teacher, **S**, to capture (print screens) her activities online. Regarding types of use, **S** mostly used MyGuru for making a general announcement regarding the course; creating an online assessment for writing assignment; and uploading course materials/lecture notes.

With regards to making an online announcement, **S** usually made an announcement on the platform when it came to the activities that students needed to do. For instance, **S** uploaded samples of documents and videos of Asian Parliamentary Debate for the students' reference. In the announcement, students were told that they were required to complete the task given before their next meeting. **S** had also set a different deadline for each online assignment which could be later than the next f2f class.

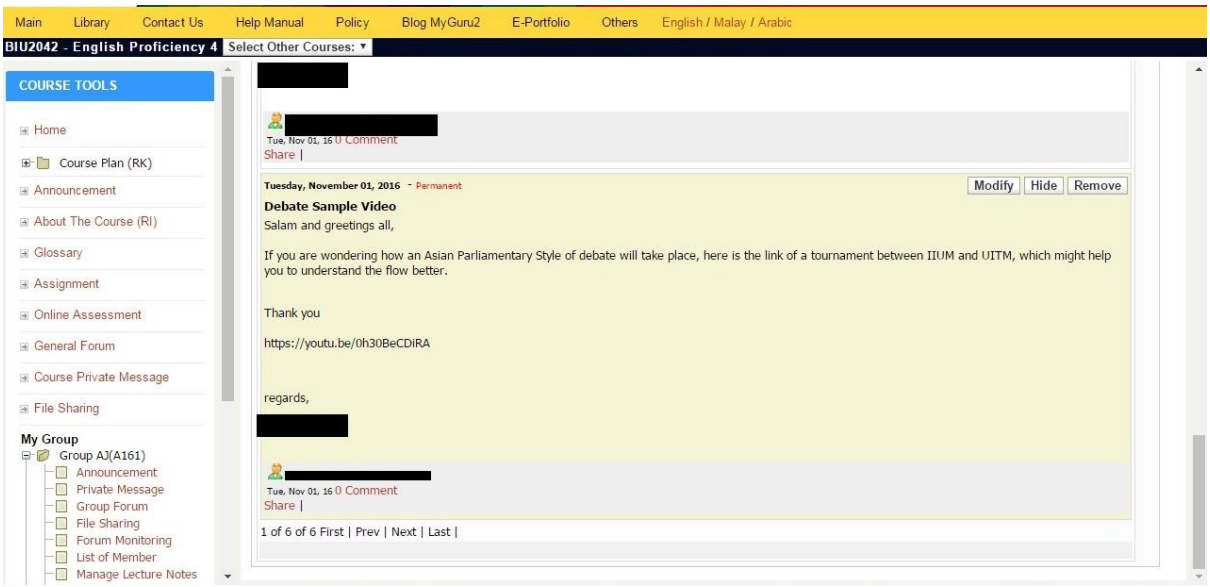

Figure 20: EP4 General Announcement of MyGuru Interface

In terms of creating online assessment, **S** had prepared writing a process essay as an individual assignment for the EP4 students. Students were required to produce an essay with a minimum of 350 words, and this should be submitted online. Once submitted, **S** could track students who did not submit their assignment, and she could also choose

whether to reject or to accept the assignment instantly. Prior to this, students would receive the notification via private message.

In respect to uploading course materials/lecture notes, **S** also uploaded different types of document formats. Among the formats were PDF, MS Word, PPT and she also included links to YouTube video for the sample of debates and grammar lessons. **S** used MyGuru not only to share information about debates, but also more on grammar such as sentence patterns, subject verb agreement, adverbial clauses, and subordinating conjunction. For the essay writing, she uploaded content on essay formats such as the writing process, compare and contrast as well as argumentative.

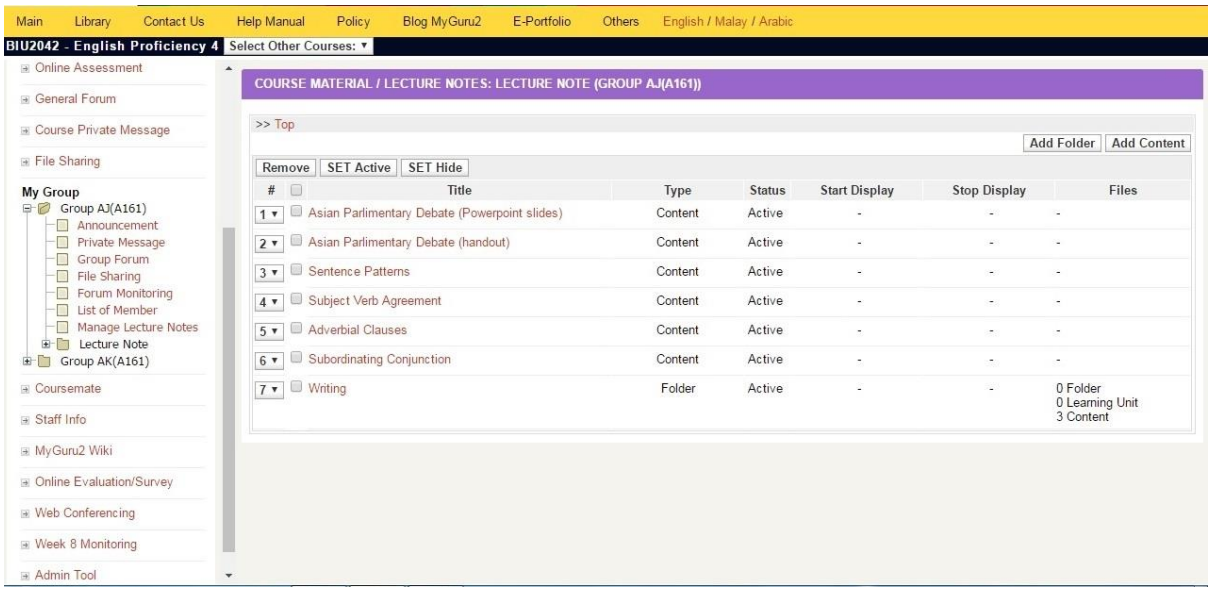

Figure 21: EP4 Course Teaching Materials of MyGuru Interface

Unlike **V**, **S** did not use the online forum, most probably because she had carried out debates in the classroom. S also did not provide any information regarding week eight monitoring.

Summary

Findings from the observations of EP3 and EP4 courses showed there was a regular use by both courses with a similar pattern of teaching structures employed by V and S. The lesson started with an introduction to the lesson, followed by some in-class activities (individual, group work). The use of MyGuru could be seen out of the classroom hours with additional activities on the online forum discussion and some supplementary grammar activities on the online assessment link. These observations really helped in understanding the curriculums taught and also the teaching and learning culture in the context. They key thing that I picked up was the similar structure of the lessons; teachers tried to introduce an element of active participation, but this was difficult. The most important thing is that CHAT provided a helpful framework for looking what was going on. From my recollection, the introduction of MyGuru, lessons were not changed very much. However, there was repeated reference to MyGuru and a sense that the teachers were signalling about resources within MyGuru that would expand their learning. There were some evidences on MyGuru being used. The next chapter will present findings for the interviews data in Chapter 6.

Chapter 6: Interviews

Introduction

Chapter 6 covers the interview with students, teachers, and MyGuru support staff. Again, it is organised into CHAT elements: tool; subject; objects; rules; division of labour; community; and outcomes. This chapter is divided into four sections:

- student interviews
- teacher interviews
- MyGuru support staff interviews
- summary

Data from the interviews are presented in table format according to:

- themes
- sub-themes
- dimensions
- P = number of participants who raised the issue
- M = total number of times this was mentioned

Students Interviews

Tool

I began by looking at tools, which is the first element in Activity Theory — the tool that most interested me was MyGuru which is the online platform provided by the university for all students and staff. From the data set of the student interviews, 143 extracts were identified as related to the tool. From these extracts, four major themes were developed: **affordances**; **characteristic features**; **accessibility**; and **other tools**.

Tool: Affordances

Table 46: Affordances of MyGuru as a Tool (Students)

Themes	Sub-themes	Dimensions	P	M
Affordances	Efficiency of resource	Communicating information	11	19
		Time/Money-saving	6	10
		Recycling materials	2	2
		Lack of reliable reading materials	1	1
	Extend classroom	Continuous learning	5	6
	Multimedia	Interaction	3	5

In respect to the first theme as seen in Table 46, **affordances** refer to what the students felt they could do with the tool. Three sub-themes emerged: *efficiency of the resource*; *extend classroom*; and *multimedia*.

Affordances in terms of efficiency of resource were broken down into four dimensions: *communicating information*; *time-saving*; *recycling materials*; and *lack of reliable reading materials*.

With regard to the first dimension, almost all students regarded MyGuru as an efficient method for *communicating information* (see Table 52). Through the general information link, students not only received an announcement from their teachers regarding the course assignments, but they could also download notes for the lecture. They could also access a forum discussion under the link to a group forum. For these reasons, some students said that through MyGuru, they could not only save money (regarding printing notes) but also avoid loss of time (this was mentioned by six students on ten occasions). As **EP4 One** student said:

> *"For instance, lecture notes, lecturer upload on MyGuru, let say the lecturer upload tonight, so we can straight away download and print it. If there is no MyGuru, lecturer maybe will give one hardcopy, so we have to photocopy, and it takes time. But not with MyGuru. It's is more convenient"* – **EP4 One**

Following that, students also suggested that the materials uploaded in MyGuru could be saved and students could recap previous lectures whenever they wanted. This was emphasised by **EP3 Six** and **EP4 Three**:

> *"Because when we attend the class, online learning we can save it like the video"* -**EP3 Six**

> *"As you said BL, it can go very far like some of the students can actually watch previous lectures if they want to actually do that one."* – **EP4 Three**

Despite the value of MyGuru, one student complained about the insufficiency of relevant reading materials to her major course, Psychology, on the MyGuru portal. This **EP3 Four** student felt Psychology was an up-to-date course, so in order to keep abreast with the current syllabus, she was required to find the latest resources including relevant eBooks in English, but she could not find them on the system. She further emphasised the gaps she faced when searching for the newest materials as:

> *"There's not much, in order to understand English better we should read, is it? But I have not found that much reading tools in the university. Maybe I should go to the library but there are no other places that easy to find books in English, not in the class, not in the café."* – **EP3 Four**

Another value of MyGuru was that students could continue to learn even if the class was postponed or cancelled. According to the students, not all teachers could complete the fixed syllabus within the given timeframe. Thus, some of them utilised MyGuru as an alternative platform to complete the syllabus especially when some of them were busy or occupied with other tasks. Not only teachers, but also students who needed to take part in the university cocurricular or extracurricular activities during the lecture hours, could use MyGuru to keep up with what they had missed. As an alternative for classroom replacement, teachers could also conduct online assessments such as quizzes and tests outside of the classroom hours. As **EP4 Three** shared:

> *"But sometime that the lecture has something to do that they have to postpone their class. And then it that the time where she has to give out the discussion, test, so they are not actually, we are still learning even though we are not in the classroom. It's continuous learning."* – **EP4 Three**

Another recurring key idea was that interaction could be initiated through the forum discussions. For example, students had to take part in the activities by responding to the forum with their comments and thoughts. On some occasions, students would also receive feedback from their teacher. Some teachers monitored the activities from the beginning. **EP4 Six** remarked this was an opportunity for knowledge transfer as she said:

> "*Lecturer will comment, oh this is something that MyGuru can help me. Help students to correct when is something goes wrong. Because mostly in the quiz and everything, the answer is already there. Okay, it's just or maybe the lecture notes. We can refer to the lecture notes or the lecturer replying us telling us that we are wrong or from comment. "oh, you are wrong, I don't agree with that". That makes us think that "oh, that's right.*" – **EP4 Six**

Tool: Characteristic Features (Students)

Table 47: Characteristic Features of MyGuru as a Tool (Students)

Themes	Sub-Themes	Dimensions	P	M
Characteristic Features	Dependency on the Internet	Internet breakdown	11	18
		Server breakdown	8	10
	Asynchronous	Delayed/no response	7	11
	Non-f2f	No physical presence	5	7

In respect to the second theme in Table 47, **characteristic features** of MyGuru were identified. Three sub-themes were generated from the student interviews: *dependency on the Internet*; *asynchronous*; and *non-f2f*.

With regard to the first sub-theme, dependency on the Internet, two dimensions were further identified: *Internet breakdown;* and *server breakdown*. MyGuru could only be accessed when there was an Internet connection but according students MyGuru was sometimes disrupted due to Internet and server breakdown. 11 students agreed that the Internet and server breakdown had become an obstacle that inhibited them from using MyGuru. One example was when they lost online quizzes or test data and needed to reattempt the quiz again. **EP3 Two** expressed her frustration:

"The assignment, especially online, maybe because of the slow network too. For example, we have the test online, and it has a time limitation, when we enter, and then the next stop working, the question we already submit will be reset again, and we need to answer it again." – **EP3 Two**

Meanwhile, the second sub-theme, *asynchronous* was about time duration in receiving responses from their teachers. All 11 instances raised teachers' inability to give responses on time or 'just-in-time'. Some even said there was no response at all. This had been one of the frustrations of using MyGuru. **EP3 Three** expressed her exasperations:

"There is one segment, if we want to ask question, it will appear the lecturer name, but it takes time for the lecturer to reply. Late reply, but we already submitted the assignment. We don't know if the lecturer has replied because there is no notification" – **EP3 Three**

In relation to the third sub-theme, MyGuru as an online platform did not require physical presence *(non-f2f)*. This characteristic was seen as a disadvantage rather than an advantage because some students said they needed f2f assistance at times. Some also saw online discussion as inauthentic due to the copying of texts rather an expression of one's own opinion. Some had further difficulties in catching up with the latest activities online because MyGuru did not provide notifications. Hence, students could not keep track of what had been updated. Some students preferred classroom discussion because the ambience felt more natural and authentic while the activities given in the classroom were easier to understand. **EP4 Four** suggested:

"Because classroom I can experience, I can see the group activities from me, I can learn from them. If we do MyGuru, you just explore by yourself. But this also good but I prefer classroom. We can see a real activity, real communication in front of you." – **EP4 Four**

Tool: Accessibility (Students)

Table 48: Accessibility of MyGuru as a Tool (Students)

Themes	Sub-Themes	Dimensions	P	M
Accessibility	Access	Internet Hardware and technical	5 4	5 4
	Design	Weaknesses Strength	9 7	17 10

From Table 48, concerning the third theme, **accessibility,** two sub-themes were obtained: *access* and *design*. The first sub-theme, *access* was elaborated across two dimensions: *Internet* and *hardware and technical* issues.

Five students conveyed different key ideas concerning access to the Internet. Two students expressed their difficulties in connecting to the Internet especially when they returned to their hometown during the semester break. Amongst other reasons, they did not have internet at home and had to go to other places, such as a cybercafé. The other two students did not face any problems with regards to the Internet as they were subscribing personally. One student had to rely on the Internet within the campus but complained of unsatisfactory connections.

With reference to the hardware and technical issues, two of the four extracts implied the students did not face hardware and technical issues because they could sign into MyGuru and access the application from their smartphones. Two other students, on the other hand, implied that they faced technical issues, i.e. they could not sign in to MyGuru. This issue according to them could be prolonged (up to a day), which made them unable to complete the assigned tasks.

Meanwhile, regarding design, this sub-theme was discussed under two dimensions: *weaknesses* and *strengths*.

Firstly, the poor design of MyGuru was the most prevalent issue raised by the students, and this was talked about regarding the absence of a desktop tool. Instead they were expected to work continually online. Being too dependent on the Internet made it impossible to access despite the fact there was internet connection because the service could sometimes be interrupted.

Secondly, the absence of notifications to inform the students the moment there was any activity made it difficult for students to keep track what had been uploaded or any announcements given by the lecturers.

Thirdly, lack of reading materials like eBooks on the site further steered students away from using the tool.

Fourthly, one student said there was no reply option to make a specific comment on MyGuru as there was on Facebook. This feature could be useful especially when students wanted to ask or give feedback related to that particular comment. The current function allowed students to reply but not to a specific comment on the post.

Fifthly, there was also no live session where lecturers could interact or reply to student queries synchronously. Finally, MyGuru interface was seen as unattractive by students.

Despite all the adverse features of MyGuru, there were also *strengths* of the design that were pointed out by seven students, who agreed that MyGuru was equipped with state-of-the-art features such as the automation components, easy navigation as well as other resource materials.

Firstly, according to the students, there was an automated open and close system for the online assessments. For instance, when the teacher gave a certain date and time for an online quiz, there would be an automated opening and closing session. Thus, students needed to participate within the assigned period.

Secondly, although the link had been closed, students could request the lecturer to open the system and resubmit their assignments online in case they faced difficulties during the first submission. The resubmission button could be re-activated by the teachers upon negotiation.

Thirdly, MyGuru was deemed as easy and straightforward to use. If the students wanted to download the lecture notes, they just needed to click on the lecture notes link and download the file by clicking the pdf icon. Comparison was made with some of the government portals which were not very user friendly.

Finally, there were other resources for educational materials tutorial on Prezi, Open4Learn link (another educational portal, MOOCs) on MyGuru even though some students were not aware of these. **EP4 Three** said:

> *"Yeah, I think MyGuru is actually is on the right path, it's just that people need to think, thinker they need to go around. It just always, like I said Prezi, was actually or maybe the information about BL. Sometimes people don't actually click that you know. They think*

MyGuru is quite boring. I think there's a lot of stuff. Like Prezi, it's very helpful. They just need to explore" – **EP4 Three**

Tool: Other tools (Students)

Table 49: Other tools aside MyGuru as a Main Tool (Students)

Themes	Sub-themes	P	M
Other online tools	Types	8	13
	Purposes	5	5

Finally, the last theme for tools in Table 49 included *other online tools* that were used by the students. This theme was divided into two sub-themes based on the codes obtained: *types* and *purposes*.

In comparison with the teachers, students were more often exposed to other online tools and resources such as Wikipedia, Facebook, YouTube, Google drive, email, WhatsApp and Telegram. Students said they utilised these social network applications for communication purposes more, i.e. to circulate information regarding the course, knowledge sharing and assignment discussion and submission. Regarding delivering ad hoc news, WhatsApp and Telegram were seen as the preferable means of communication instead of MyGuru due to its faster feedback. Almost all students had access to these applications. With MyGuru, students had to constantly check for any latest information and tasks due. As **EP3 Six** shared:

"Telegram is where we can upload notes and videos. Like email. But it's more easy because there's and app in android and iOS. So, we can install, to our notes, to our learning. We haven't used in classroom. But we mostly use if for notes sharing with our friends." – **EP3 Six**

Subject

Subject is the second element in Activity Theory. From the student interviews, subject was defined as a group of people or individual who used MyGuru in the EP courses.

151 extracts were tagged in the data set, and five major themes were developed which included: **behavioural**; **affective and emotional state**; **cognitive skills and abilities**;

motivation to learn English and use MyGuru; as well as **orientation to learning persistence.**

Subject: Behaviour in Relation to MyGuru (Students)

Table 50: Behaviour of Subject (Students)

Themes	Sub-themes	P	M
Behavioural	Instrumentation	2	3

Theme one discusses **behavioural** aspects in relation to MyGuru and as shown in Table 50, one sub-theme was identified: *instrumentation*.

Students utilised MyGuru as a source of reinforcement to continue learning after class hours in the form of online assessments such as quizzes and tests. Students practised their language learning as instructed by the teachers and sometimes they re-attempted the exercises multiple times. As **EP3 Two** put it:

> *"Sometimes, even if the lecturer gave like just one exercise, mostly I will do like three, depends on the question"* – **EP3 Two**

Subject: Affective and Emotional State (Students)

Table 51: Affective and Emotional State of Subject (Students)

Themes	Sub-themes	P	M
Affective and emotional state	Acceptance	13	25
	Mindset/Perceptions	2	2
	Scared	1	2

Meanwhile, theme two in Table 51 covers **affective and emotional state** and refers to students' emotions and feelings. For this theme, three sub-themes were developed: *acceptance*; *mindset/perceptions*; and *scared.*

Concerning *acceptance*, in general, students were not only accepting of the idea of MyGuru but quite positively orientated towards using it. In practice, however, the problems quoted earlier, for example, network and server breakdown, the absence of physical presence, and the tendency to copy and paste meant they lost much enthusiasm.

Another group of students, on the other hand, remained optimistic because they had found MyGuru helpful. Although one student perceived MyGuru as a challenge, she also saw it as:

> *"…a learning process. We combine it the MyGuru and the lecturer combine it, it can develop your mind, your knowledge, your skills. Anything that is a new experience, I accept the phase, the challenge."* – **EP4 Four**

In respect to *mindset/perceptions of students towards MyGuru*, two students hinted that most of their friends saw activities conducted on MyGuru platform as unnecessary and unimportant. **EP4 Eight** felt:

> *"Some of my friends maybe think that MyGuru is like another assignment you know. They feel like they don't have to do it at all. Because it's enough with the actual assignment that we have to do"* – **EP4 Eight**

Within **EP3 Four** saw scepticism as a part of students' 'culture', i.e. the unwillingness to put the effort into learning, in particular when it was conducted online. He insisted this 'culture' should be changed.

Another emotional reaction was feeling '*scared*'. One student, **EP3 Five** indicated that she did not dare ask her teammates to do something in regard to their group assignment. According to her, she would prefer to become a passive learner rather than playing a role as a group leader and believed that she did not possess the necessary qualities to become one. She also put it as:

> *"For me, you have to be brave. To approach a person and to talk in front of people where I don't have this kind of courage. I tend to cry when I stand in front of people……They had this where we have to speak in front for a few seconds about a chair. She had the courage to go in front, but I don't have that because I'm just so scared"* – **EP3 5**

Subject: Cognitive skills and abilities (Students)

Table 52: Cognitive skills and abilities of Subject (Students)

Themes	Sub-themes	P	M
Cognitive skills and abilities	Knowledge and skills	8	13

Theme three in Table 52 probes students' cognitive skills and abilities in terms of their understanding (knowledge) about MyGuru and the competencies and skills they had in order to navigate MyGuru. Only eight out of 15 students talked about this and from these eight students, MyGuru was seen as an easy to operate tool. All said the use of MyGuru did not require intensive computer skills although some maybe unfamiliar and difficult to understand at first. But after they had familiarized themselves with it, they saw MyGuru as easy and straightforward. However, this convenience only applied to the features that they most often used (lecture notes, general announcement, forum and online assessment). Students indicated they had no idea what the other links did. They were puzzled as to how to use them since they claimed there was no demonstration or training provided.

Subject: Motivation to learn English and use MyGuru (Students)

Table 53: Motivations of Subject (Students)

Themes	Sub-themes	Dimensions	P	M
Motivation to learn English	Extrinsic Intrinsic	Surface learner Deep learner	9 8	20 15
Motivation to use MyGuru	Extrinsic		1	1

Theme two in Table 53 tells about the **motivations** of subjects to learn English and to use MyGuru. Two types of *extrinsic* and *intrinsic motivations* were identified for the motivation to learn English whilst one motivation to use MyGuru was noted.

In respect to the *extrinsic motivation* to learn English, students' behaviour was driven by external rewards. Overall, students were 'surface' students in orientation because they only carried out activities on MyGuru because of teacher direction. One of the students' roles was to complete assignments which could only be accessed on MyGuru. Hence, they had to use MyGuru and did so. Most of these students did not initiate their learning and only followed the instruction given to them. For instance, **EP3 Three** said she had to do the tasks assigned just because she was obliged to:

> *"Firstly, because we have to take this course…I was forced to do the exercises because of marks…"* – **EP3 Three**

The other motivation to learning English, *intrinsic motivation* refers to setting one's own learning goals. Eight students talked about their fondness towards the English language. They loved learning English without being asked or forced by anyone. The feeling emerged from within, and once they managed to master one of the language skills, they showed their satisfaction. **EP4 Two** said:

> *"Right now, I love English actually. I hope I can learn more about English and I can practice especially my pronunciations because I think I'm not satisfied with my MUET. I just got band 3."* – **EP4 Two**

Students also realised they could benefit in terms of developing pronunciation, vocabulary, grammar and the writing structure from the online forum and discussion as well as the online exercises.

Students became aware of how much more there was to learn English. **EP3 Four** student said that at first, she thought she knew everything about English, but she found that there were a lot of more that she needed to know. She put it:

> "*Yes. Because instead of thinking that we are understand already the English lesson, if we go deeper, we will see there are other things that we don't really understand about English. E.g., even the simple present tense, we have been doing that for 2,3 weeks, I realised that I don't really know about tense. Even as simple as tense."* – **EP3 Four**

On the other hand, in terms of **motivation** of subjects **to use MyGuru**, students knew that her lecturer would monitor their participation in the online learning. Thus, the use of MyGuru had encouraged one student to actively get involved and at the same time hoped to receive feedback from her teacher. This external driven was felt as a burden at first, but after a while, she was able to become more relaxed. As she put it:

> *"At first, yes, it's a burden. Because you know the lecturer like force us to do even though you do not understand, or you want to ask, but you must settle the task first. But nowadays because I know lecturer reads our comments and replies. And they can see through the comments that we are read it or not. So nowadays I prefer like do more in MyGuru. Because this semester I do a lot of tasks in MyGuru. So, I think it's better that."* – **EP4 Eight**

Subject: Orientation to Learning Persistence (Students)

Table 54: Orientation to Learning Persistence of Subject (Students)

Themes	Sub-themes	P	M
Orientation to learning persistence	Proactive in finding solutions	14	49
	Procrastinator when seeking help	5	7
	Demotivated when facing problems	2	3

Theme five in Table 54 expands on students' **orientation to learning persistence**. Three sub-themes of students' learning orientation were identified: *proactive in finding solutions; procrastinator when seeking help* and *demotivated when facing problems.*

The first sub-theme, proactive in finding solutions was spoken about on 49 occasions from 14 interviews, all conveying a similar view. According to students, the first solution would be trying to solve the problem by themselves before resorting to their peers or their lecturers as an alternative. For example, when students had difficulties with the Internet connection, some of them were willing to take extra measures by subscribing to other internet providers and did not rely solely on the campus network. Such measures showed how students were persistent to this commitment and in return received better internet connection.

Additionally, some students on their own initiative took extra tuition and did not rely on the teachers' learning materials. Beside doing exercises given by the teachers, students also learnt from other English resources such as books, novels, online articles, dictionary, and even newspapers, for the sake of improving their English.

Setting up a study group was also another example that displayed students' proactivity in solving their learning problems. **EP4 Six** student explained:

> *"If something difficult for us, normally we are discussing, we ask our member group, our member to go to café, and maybe the library, so that we can discuss how to do this, how to do that. If we still don't get that point, we will WhatsApp miss H, or my lecturer so that we can know the way the better way, or the easy way to complete our assignment"* – **EP4 Six**

Finally, another student explained it was important to manage one's time proactively. Self-management was key to overcoming problems that were related to time constraints. One student, **EP4 Three** said he had his time managed well, and whenever he tended

to procrastinate, he would reward himself. Similary, **EP4 Six** student also had her time well-managed. As she put it:

> "*Because I'm a Sport Science student, I got training in the night, nighttime. And then, I got SUKSIS which is every Saturday and Sunday. And then, class, it's just like one, Monday to Friday is my working day. So, I got class, I just go class, and then after I back to class, go to room and I do the assignments. So, that's the time I finish my assignment because Saturday and Sunday I will focus on SUKSIS, I got marching, I got class for SUKSIS, Law class and then so Monday to Friday is my working time. So, the night I will train*." – **EP4 Six**

On the other hand, the second sub-theme, *procrastinating when seeking help,* describes students as procrastinators. Five students explained they sometimes procrastinated when it came to seeking help. They explained this was due to their 'innate character', i.e. shyness that made them more reluctant to seek help. Alternatively, some students reported that procrastination was 'common' mostly because they did not know where to seek help and whom they should contact in regard to the problems they had either on MyGuru or in the classroom. This had further demotivated the students to seek other solutions to their problems.

One student felt her 'laziness' was another factor contributing to her demotivation. There were other issues too some involved being 'homesick' due to being away from home, and health problems were another raised, **EP3 Five**:

> *"Because I'm not that kind of girl that very into extreme sport. Which is my leg. They tend to be cramp most of the time without reasons. Because maybe I had a few injuries during my young age. Because I'm a runner, long distance. Alter I stopped, I tend to get my legs tend to be too cramp, simply cramp. I don't have reason for it. My leg is simply become, so I think the conclusion is I think kayaking give me the difficulties because I tend to be in pain, and it affects my studies. Because in the Sunday morning and the next as well I felt the pain"* – **EP3 Five**

Objects

Object is the third element in Activity Theory. Object refers to students' motive or purpose, here in respect to their learning activities. Based on 87 extracts obtained from

the data set, two themes were identified: **addressing instrumental goals** and **developing a communicative competence**.

Objects: Addressing instrumental goals (Students)

Table 55: Addressing Instrumental Goals as Object (Students)

Themes	P	M
Addressing instrumental goals	13	65

The first theme in Table 55, **addressing instrumental** goals was mentioned by 13 students in 65 excerpts.

The key idea for this theme was that almost all students who took the EP course hoped they could improve their English acquisition in order to have a better chance of being employed after graduation. English language had always been perceived as having added value when it came to job hunting. Language proficiency could give them the opportunity to not only work with local companies, but to widen their options outside of the country too. Working abroad was one of their dreams and taking the EP course could help realise this dream.

On top of that, EP courses were made compulsory for all students before graduation. Therefore, students were 'forced' to take the course even if they did not want to. They still had to take part and complete all assignments, especially the ones that were awarded marks, so that they could pass the course and advance to the next level. As **EP4 Seven** student put it:

"Yeah. If we don't do the assignment, it will affect our marks" – **EP4 Seven**

Objects: Developing a Communicative Competence (Students)

Table 56: Developing Communicative Competence as Object (Students)

Themes	P	M
Developing a communicative competence	11	22

The second theme as shown in Table 56, **developing communicative competence**, was mentioned by 11 students on 22 occasions. Students wanted to enhance their communication skills in English and were hoping that the EP course could help them

to achieve this. Students wanted to become proficient English speakers, so they could speak in English with confidence, expand networks with other people from different backgrounds and ethnicities. Students believed being fluent could open doors to many other opportunities once they had graduated and improved their social ability. **EP4 Eight** said:

> "*Yeah. Communication. Because I can see the when we talk in English, we can do it outside from the class and we can communicate well anytime that we have to talk in English, we can improve our social skill also.*" **– EP4 Eight**

Rules

Rules are the fourth element in Activity Theory. Rules are the guidelines and conventions that regulate an activity system. From the data set of the student interviews, a total of 41 extracts were tagged, and three themes were developed: **syllabus**; **policy on MyGuru and policy on EP courses.**

Rules: Syllabus (Students)

Table 57: Syllabus as Rules (Students)

Themes	Sub-themes	P	M
Syllabus	Contents	10	12
	Inflexibility	4	8
	Progression	3	4

Table 57 shows the first theme, **syllabus**, and other three sub-themes: *contents*; *inflexibility* and *progression.*

The first sub-theme, *contents*, covered students' comments about the books and organisation of teaching. Overall comments were largely critical. Activities lacked interactivity. As **EP4 Three** said:

> *"For the course EP, I think more play activities would be quite good especially to those who are very shy. You might be shy but after hours or practice, you want to do your best. No matter what. But you have to award marks if not people will take it half-heartedly and people won't be involved that much. Formally structured, that would be help."* – **EP4 Three**

Students also felt that grammar was the focus of the EP courses and very little emphasis was put on other language skills such as writing, speaking, listening and reading. As **EP3 One** said:

> *"Grammar, actually they only focus on the book there, yeah but does not help a lot."* – **EP3 One**

On the more positive side, some students thought the most recent learning modules were better in terms of content organisation. According to them, they noticed they could understand the instruction better, and this had been a great improvement.

Secondly, in regard to the course inflexibility, students felt that they had to follow the format that had been fixed in the instructional plan. According to them, usually at the beginning of the course, the teacher would inform them of the timetable and syllabus and what they were expected to do throughout the course. Alternatively, students could also get a copy of the instructional plan by downloading it from MyGuru. Students felt that they had to follow the format in order to succeed and advance to the next level.

Thirdly, students saw the course as lacking progression. Four students agreed that they could not see the difference between EP1 and EP4. For them, the difficulty level of the course, as well as the content of the modules, were similar across the levels. **EP4 One** felt that she learnt nothing new from the advanced EP course as she put it:

> *"If I'm given the chance, I want to see the different levels, I mean to see the difficulty levels increased. But, not they are just the same."* – **EP4 One**

Rules: Policy on MyGuru and EP courses (Students)

Table 58: MyGuru and EP Courses Policy as Rules (Students)

Themes	Sub-themes	P	M
MyGuru	Requirement (MyGuru)	2	2
EP courses	Requirement (EP courses)	4	5

Table 58 shows two themes **MyGuru** and **EP course**, were each discussed with *requirements* as the sub-theme. According to the students, the policy on MyGuru required

them to participate in the activities because their participation was graded. To get a good mark, they had to do what was given by the teacher. **EP4 Three** put it:

> *"Because it's a requirement and also it's actually also to test my knowledge on whether I actually understand what I'm learning and also to actually see my level of whether I acquire that knowledge or not."* – **EP4 Three**

The *EP course* was seen as compulsory for graduation. Students would not be allowed to graduate unless they had fulfilled the requirement. **EP4 One** made a comparison between his university and other institutions. According to her, students from other universities had to sit for MUET upon graduation, but they had to study the MUET syllabus themselves. Here, the university had provided EP1 to EP4 courses consecutively, and she saw this as a good opportunity for continuous learning for language acquisition.

Division of labour

Division of labour is the fifth element in Activity Theory. Division of labour refers to the inside and outside taskforce within an organisation or activity that influences the transformation of the object into the outcome. Division of labour was tagged 50 times. For this element, two recurring themes between **inter-role** and **intra-role** were reported.

Division of labour: Inter- Role (Students)

Table 59: Inter-role as Division of Labour (Students)

Themes	Sub-themes	P	M
Inter-role	Task division on assignments	7	28
	Interaction	8	16

In Table 59, two sub-themes were identified for the **inter-role**: *task division on assignments* and *interaction*.

In respect to the first sub-theme, inter-role means roles between peers. Students took on responsibilities when working in a group. For instance, once the assignment was received, students in each group would appoint a group leader on a voluntary basis or by drawing lots. After that, the group leader would divide the tasks into

segments/chunks to each of the group members equally. After each of them completed their part, they would compile a report together, and the leader would submit it to their teachers via MyGuru platform. However, other students preferred to do the tasks together. They brainstormed their ideas together, discussed and solved the problems they faced. There were, of course, conflicts while working in a group. One student did not get cooperation from her teammates as she was supposed to. She put it:

> *"My assignments which is for me, I prefer doing assignment the last minute because for ep courses we'll be having a work, which is we have five of us in a group. Three of us is from sem 1, but 2 of them are upper2 years. But then, they don't really corporate well. So, I don't really like this kind of attitude in a group."* – **EP3 Five**

Some group members seemed to take on a 'slacker' identity and this had made the completion of the task more difficult. Other students from the group had to cover for them. One student preferred to work with people she knew and would rather choose from her circle of friends. This way she could complete the task better and avoid conflict too. As she said it:

> *"…we know we have bitter moment, so if like one time, I'm not with my group member, but this is the lecturer put a suggestion, a group member. So, it's quite difficult because I'm not close with them. And then they misunderstanding my way of assignment. ….I immediately tell the lecturer, I'm the only one said I prefer we choose our own group member, rather than we choose, because we've been experienced, every group, many kinds of that moments that I've been lah. So, during semester 6, so I have my fit group that can go along with the assignment."* – **EP4 Four**

The second sub-theme, *interaction,* was talked about in terms of the way students communicated with each other. Firstly, most of the students used WhatsApp as the medium to circulate information quickly. Sometimes, they communicated in their mother tongue instead of the target language, English. This was because not all students were proficient in English, and communication in Malay was seen as easier.

As interaction in the classroom illustrated, not all students wanted to voice their opinions freely. This was due to their reticence (see Subject: Orientation to learning persistence) and a sense of being unsupported when they made a mistake pronouncing certain words or used the wrong choice of verbs or grammar. Some felt they were

laughed at or belittled by others. Such acts had reduced their self-confidence, thus they preferred to stay quiet, rather than actively participating. As **EP3 Three** said from his observation:

> *"Because the people around us actually not supportive. They will just laugh at us if we use the wrong word. If we use the wrong pronunciation, they just laugh and mock us."* – **EP3 Three**

In contrast, there was a student who always voiced his opinions because this was the only class that used English as a medium for communication. However, he commented that other students would label him as an attention seeker.

Division of labour: Intra-role (Students)

Table 60: Intra-role as Division of Labour (Students)

Themes	Sub-themes	P	M
Intra-role	Responsibilities	6	6

The second theme in Table 60 **intra-role** was talked about in terms of *responsibilities*. Intra role means roles within oneself. The general tone for this sub-theme was all students were aware of their own roles, i.e. to study the course, sit for the exam, complete the assignments and attend the classes as they were supposed to. Students also mentioned their activities would usually be monitored by the teachers. However, they were undergraduate students, and they were also expected to be responsible for their learning. Teachers would neither force the students to attend the class regularly nor spoon-feed them with information. The key ideas of being a university student, in this case in EP course, was to promote independent learning. As **EP4 Eight** student said:

> *"Maybe we can help our lecturer to do something without her instruction like make a group or pick our own teammates for ourselves. Maybe we can do our exercises"* – **EP4 Eight**

Community

Community is the sixth element Activity Theory. Community refers to social groups in which the activity is carried out. Community codes were extracted 45 times, and two recurring themes were identified: **teacher** community and **MyGuru support staff** community.

Community: Teacher (Students)

Table 61: Students' Views of Teacher Community (Students)

Themes	Sub-themes	Dimensions	P	M
Teacher community	Roles	Teaching	9	13
		Giving instructions	7	12
		Displaying pleasant manners	6	3
		Giving feedback (on MyGuru)	3	2
		Providing help (with MyGuru)	2	2

For the first theme in Table 61 shows the **teacher** community was discussed from the students' perspectives regarding *roles*.

The roles of the teachers were distributed into five dimensions: *teaching*; *giving instructions*; *displaying pleasant manners*; *giving feedback (on MyGuru)* and *providing help (with MyGuru)*.

In respect to the first dimension, all students agreed that *teaching* was the most important role of a teacher. Teaching, in this case, was regarded in respect to what was taught, and how and where it was taught. Firstly, students noticed that teachers would distribute the lecture notes on MyGuru and ask them to download the notes before the class. After that, they would introduce and discuss the topic for that session based on the notes. However, this pattern was not always followed by other teachers. Some students claimed that they had not been given notes in advance. **EP3 One** expressed her dissatisfaction:

> *"Lecture notes, we can get it straightforward, But usually after the class. It's not fine. Actually, I want to jot down the notes beforehand. The lecturer often speaks too fast. Better he gives us first; then he just talked so we can follow."* – **EP3 One**

Secondly, students raised some criticism of their teachers' teaching. Among the comments, one student raised the issue that her teacher only taught for one hour and a half instead of the scheduled 2-hour lesson. In addition, one said the auditorium in which he was placed was too spacious for 50 students. He said that his attention was easily diverted due to the large open space and found it an unconducive place for learning.

Two students wanted to have more integration of multimedia elements such as video to make the lesson more engaging and believed such integration could retain their

attention to learn for a longer period. Another student wanted her teacher to enforce rules during the class and to ensure speaking English was compulsory. This, according to her, could help students' language acquisition. This teacher was reported as speaking too much, and students were not given opportunities to speak during the lesson.

One of the teachers' other roles was to *give instruction*. According to the students, when a teacher asked them to do any activities on MyGuru, he or she would demonstrate the process first. Mostly, teachers would act as an instructor at the beginning of the course. However, students could also see their teachers as 'facilitators' in the class who could also monitor activity on MyGuru.

The third dimension covered teachers as people who should display good manners. Six students felt their teachers *had pleasant manners* and students described them with words such as 'nice', 'understanding', 'likeable', 'helpful', 'professional', 'firmed', 'friendly', 'patient' and 'open for opinions'. All of them agreed their teachers had reduced their anxiety level.

Giving feedback was another role that the teachers assumed. However, students said that not all teachers used MyGuru as a platform for providing feedback although there were activities done online. However, students did not say whether they lacked feedback in the classroom as well.

When they talked about teacher being helpful, students related it to how teachers had become a source of assistance *for providing help regarding MyGuru,* and they were always referred to whenever there were problems. EP3 2 put it:

> *"No, usually the lecturer will fix the problem (MyGuru). We just inform him what the problem, he will fix it. Because mostly 50% of us will face the same problem"* – **EP3 Two**

Community: MyGuru Support Staff (Students)

Table 62: Students' Views of MyGuru/ICT support staff (Students)

Themes	Sub-theme	Dimensions	P	M
MyGuru Support Staff	Assistance	Training	9	13
		Support	2	2

In Table 62, the second recurring theme for the community was **MyGuru support staff** who were also a part of the community from the students' perspective. Here students'

comments were tagged as *assistance*. Assistance was talked about from two dimensions: *training* and *support*. All the students talked about the amount of assistance they had received from support staff.

In regard to the first dimension, thirteen excerpts showed a split of opinion with regards to the training. Eight of the excerpts showed students having received no training on the use of MyGuru while the other five showed examples of such training.

Those who had received classes did so at different times, some during the first semester, others in the third semester. These opinions about training were puzzling because some of the students thought it was compulsory to attend the training, while some said not.

In regard to the second dimension, support, there were mixed opinions again. **EP3 Three** said she did not receive any support from the staff when encountering technical issues whereas **EP4 Three** expressed that the support was given promptly. He further expressed:

> *"I've contacted the ICT for any information regarding whether the internet is down maybe even MyGuru is down, I definitely contacted them for assistance. From a phone call. I was quite shocked that they give a fast reply. I forgot my password at that time, so I was asking them for them to reset my account. And they did that and then after be able to actually set a new password, I was able to get to my email. They assist me promptly, very promptly."* – **EP4 Three**

Outcomes

The outcome considers the consequences or effects of action within the system. For the outcome, a total of 110 extracts were tagged, and five recurring sub-themes were identified: **behavioural**; **affective**; **cognitive**; and **challenges**.

Behavioural Outcomes (Students)

Table 63: Behavioural Outcomes (Students)

Themes	Sub-themes	P	M
Behavioural	Usage	14	31
	More spoken text communication	5	5

In regard to the first theme in Table 63, **behavioural** outcome was discussed in terms of *usage* and *more spoken text*. *Usage* covered types of functions in MyGuru as well as the frequency of use. All 31 excerpts (14 students) showed a similar pattern of MyGuru use. Most students used announcements, forums, online assessments, submission of online assessments as well as private messaging. These were used for getting information about assignments and submitting assignments online.

The frequency of use sometimes depended on that particular semester. Some semesters required students to be active on MyGuru while some not, and some teachers used MyGuru often, others rarely. **EP3 One** put it:

> *"Actually, my lecturer does not use the MyGuru. They seldom use it. So, I just go online to see the assignment. I jot down the questions. The lecturer also less upload the question MyGuru. I jot down the questions, I do. If the lecturer asked us submit online, I will submit online. If not, I just submit hardcopy.*" – **EP3 One**

The second sub-theme was about the use of MyGuru to communicate informally with friends and teachers in a kind of spoken text, i.e. informal writing which used language typically of spoken rather than written communication. For example, "how are you today?". This had the result of feeding directly into their fluency of English speakers.

All five students felt that MyGuru had become a platform for them to interact with their friends in English. Some students were afraid to speak in English in front of the class but, after using MyGuru, they more confident to speak. One student said this platform was ideal for passive and introvert students. As she put it:

> *"Maybe other person will not be able to converse to their lecturers directly, maybe im quite brave regarding class lesson. But maybe someone who are introverts or passive in class they can view this as a medium to talk to the lecturers."* – **EP3 Four**

Of course, use of the spoken text was not unproblematic. As seen earlier, some students were found using copy and paste in order to communicate with others.

Affective Outcomes (Students)

Table 64: Affective Outcomes (Students)

Themes	Sub-themes	P	M
Affective	Boosting self-confidence	5	7

The second theme in Table 64 displays **affective** as the theme and *boosting self-confidence* as the sub-theme. The sub-theme was developed from seven extracts from five people. In respect to this sub-theme, students felt they gained better *self-confidence* and had been encouraged to speak more in English. **EP4 Eight** said:

> *"Because in EP class we have to talk in English. Miss H will always talk English. But I know she will speak in Malay if there are students who don't understand what she said but, in that situation, I can make myself confident to talk even though I know that some grammatical error, but I want to talk in English because I want to improve myself."* – **EP4 Eight**

Cognitive Outcomes (Students)

Table 65: Cognitive Outcomes (Students)

Themes	Sub-themes	P	M
Cognitive	Challenged to think	7	10
	Developed language skills	5	7
	Developed IT skills	2	2

The third theme in Table 65 was about the **cognitive** outcome. This theme discussed the impact of the tool on students' cognition. From 19 extracts, three sub-themes dere categorised: *challenged to think*; *developed language skills*; and *developed IT skills*.

The first sub-theme *challenged to think* showed that the impact of using MyGuru had led students to be more critical when voicing their opinions. In all ten instances, students conveyed a similar key idea. Students said debate stimulated their speaking skills and pushed them to justify their arguments. In addition to that, students became more critical when amending their comments on MyGuru. As **EP4 Eight** said:

> *"Yes, because the BL can make us more creative in thinking. So that we don't have just learn at the class. We also learn through MyGuru. Maybe we can in classes, we can just ask the lecturers about what we don't understand. But in the MyGuru we can openly give our own*

opinion. Maybe we can read something else, and we can add up in the forum or the task given. We can share anything with others" – **EP4 Eight**

Students claimed using MyGuru had d*eveloped* their *language skills*, in particular reading, writing, and oral fluency. Six from seven extracts showed students claimed they could use a wider range of vocabulary and had better comprehension when encountering English reading materials. In addition, students could also use appropriate responses when writing on MyGuru forum. As **EP4 Six** shared:

"Yeah, like I've told just now, we comment each other and then we argue the opinion. I don't think that this one is not. We comment like "thank you with the information but I don't agree with the statement, this and this". In MyGuru we can bash something like that, in my opinion lah. So, I don't agree with her, so I comment down there, I said "thank you for your information, but". It's a proper, polite way. Yes." – **EP4 Six**

The third sub-theme, developed IT skills, was about students' first encounter with MyGuru. Students said that they did not know how to use MyGuru at first, but after a while, they began to get used to it.

Challenges (Students)

Table 66: Challenges as Outcomes (Students)

Themes	Sub-themes	P	M
Challenges	English language	9	15
	Time constraint	7	14
	Propensity to copy and paste	5	8
	Some skills difficult to address	5	7

The general impression that has been gained from the previous sections was that the introduction of the BL approach applied unevenly and had both positive and negative impacts. Thus, the challenges must be seen in a wider context. These challenges covered: *English language*; *time constraint*; *propensity to copy and paste*; and *some skills difficult to address*.

Students shared some problems that they faced in their learning. Among the problems were unsupportive learning environment, poor time management, lack of vocabulary and lack of reading comprehension. The unsupportive learning environment was expanded on as a preference to speak in their mother language in case they were

mocked by their peers. They also faced personal problems like having difficulty to find transport to the lecture and an unconducive classroom environment. Lack of vocabulary and difficulty understanding some reading materials, especially for students who needed to deal with a lot of technical terms, also became an impediment to their learning. This problem was made worse when the students themselves had difficulties in managing their time well. As **EP3 Four** student said:

> *"Of course. I have problems. Because I'm a first-year student, I can't really adapt to the surrounding well. I have to do the assignment, I have to take COCU, I have to involve activities in college, activities to get my points. And reading some English materials I tend to "we can do it later."* – **EP3 Four**

Time constraints, as a second sub-theme, was talked about by seven students. All of them raised different types of issues. The most apparent problem was that students had opportunities to take part in many other activities including extracurricular ones. Having too much on offer meant they had to select priorities and English language was not their priority.

Some students said they were too busy with their major course to study English. This was given to justify why they could not give more focus to English Proficiency. Furthermore, English was not a part of their major course (except for TESL students). Thus, they tended to take English for granted.

As explained earlier, copy and paste was another problematic issue raised by the students. They said that they did not learn how to come out with their own original ideas and thoughts and were happy to cut and paste ideas for discussion from the Internet.

As for the last sub-theme, *some skills* were found *difficult to address* be it in the classroom or on MyGuru. Students had difficulties writing accurately, speaking confidently, and sometimes grasping what was being discussed in English. **EP3 One** shared her unattainable goal:

> *"I hope I can improve a lot from the course but normally now is, I have taken two semesters for the increase, proficient but actually for my speaking skill that not improve a lot."* – **EP3 One**

Teacher Interviews

Tool

Overall, from the seven teacher interviews, a total of 94 extracts were identified, and four major themes were developed: **affordances**; **characteristics features**; **accessibility**; and **other online tools**.

Tool: Affordances (Teachers)

Table 67: Affordances of MyGuru as a Tool (Teachers)

Themes	Sub-themes	Dimensions	P	M
Affordances	Extend classroom	Continuous learning	5	13
		Learning at own pace	4	7
	Multimedia	Interaction	4	5
		Fun learning environment	3	4
		A new environment for T&L	2	2
	Efficiency of resource	Communicating information (Time/Money saving)	3	8
		Recycling materials	1	2

The first theme, **affordances** in Table 67 shows what teachers could do with the tool in their classroom. Three sub-themes were identified: *extending the classroom*; *multimedia elements*, and *efficiency of resources.*

The most frequently mentioned aspect of *extending the classroom* was that the tool allowed the students to learn continuously by studying outside the classroom. This was mentioned thirteen times in five teacher interviewees. The tool also offered a means to replace a lecture that the teachers missed, perhaps due to public holiday, not having enough time to finish the syllabus or even to attend a workshop for their CPD. Since finding a time and place for a lost class seemed difficult, this tool was seen as the best alternative for that purpose.

Teachers also drew attention to the possibility of using MyGuru for students to learn at their own pace. The overarching idea from four interviews was that classroom learning was being rushed and teachers did not have enough time. Teachers were also concerned that students needed to follow the teacher's teaching pace and it was difficult for some

to keep up. Hence, MyGuru was a platform to allow students to go at their own pace to watch the video, have extra time for preparation and do exercises.

MyGuru was a platform in which other media could be embedded, and *multimedia elements* were a part of its attraction. Four teachers talked about the interaction which multimedia triggered five times. For instance, when the teachers uploaded songs and video clips, there was more discussion from the students. Two teachers shared similar views on this and one of them, **T** recalled his experience fondly:

> *"Sometimes when I crack jokes, they don't find it funny as well (laugh). So, generally videos from YouTube, if they find it funny, then you will be good - and sometimes, I'm using songs as well and the video clips of the songs. I will even discuss the issues in the lyric and in the video clip as well."* – **T**

T further elaborated that he used the *multimedia elements* in his teaching materials and found that they acted as a good catalyst for discussion among his students.

MyGuru was also seen as an *efficient resource* to disseminate information. This was mentioned eight times by three teacher interviewees and one of them, **V** emphasised that note sharing played a vital role in communicating information to students. Besides note sharing, students could also send their assignments via the tool. As **X** put it:

> *"And then for the students, the advantage for the students instead of having piles of papers and sometimes they might lose the paper, they can actually download from the website into their smartphones, into their tablets. So, somehow rather it helps them to you know, to have a learning process in a more advanced way, more technology incorporated. So, they don't have to you know because sometimes the students they have problems with budget. They have to Photostat, photocopy the books, the notes, so by having this platform, BL where your notes are uploaded online, the students can access it anywhere, anytime using their smartphones and tablets. I think that is the advantage for both teachers and students."* – **X**

In this example, online sharing had provided an alternative for paper saving that was convenient for both students and teachers. **T** added the materials could be recycled in other semesters.

Tool: Characteristic Features (Teachers)

Table 68: Characteristic Features of MyGuru as a Tool (Teachers)

Themes	Sub-Themes	Dimensions	P	M
Characteristic Features	Dependency on the Internet	Internet breakdown	6	11
		Server breakdown	4	4
	Non-f2f	No physical presence	3	5
	Asynchronous	Delayed response	2	4
	Synchronous	Prompt feedback through online exercises	2	2

Table 68 shows the second theme, **characteristics features** of MyGuru, in other words what defines it in technical terms. The emerged sub-themes were a *dependency on the Internet*; *non-f2f*; *asynchronous*, and *synchronous*.

For the first sub-theme, six interviewees drew attention (11 times) to the fact that MyGuru was *Internet connected*. The reliance of the Internet connectivity was only talked about in terms of problems. These problems included the Internet breakdown. Also, four teachers mentioned *server breakdown* on occasions. All teachers had experienced these technical problems which had naturally frustrated them and reduced their enthusiasm for using the tool. They also reported that students complained about a similar issue when justifying not doing the allocated tasks on MyGuru. Teachers too explained their commitment to preparing materials on MyGuru was also disturbed due to this problem. As **X** explained:

> *"So, sometimes the students have difficulties, I also have difficulties where the we will face lagging, the system will be lagging and then, it takes time for us to access to the websites, so somehow rather that kills the students' motivation to you know to have other materials, other sources and other method of learning. And it also kills my motivation to use that technology, and then sometimes I have to switch, I have to depend solely on teacher talk, no whiteboard talk, chalk talk."* – **X**

The second sub-theme of the tool which three interviewees mentioned, was *non-f2f* learning since it was mediated by technology. The absence of physical interaction meant that some teachers did not feel the need to wear a 'teacher mask' when interacting with students. The distant and less emotional aspect of interaction appealed to one teacher in particular. However, the same feature made teaching more difficult for some because

not all students could understand what was being taught without seeing or being able to have communication in person. As **S** told me:

> *"So, I would like to provide one session for grammar. So, this is only for grammar. Because I tried that before, but they don't understand. Not really don't understand, it's like difficult for them to get the rules. Without see f2f"* – **S**

Two teachers mentioned the *asynchronous* feature that MyGuru provided. One teacher looked at the asynchronous feature in a positive way another in a negative way. For **S**, asynchronicity could provide extra time for discussion. However, **T** felt the delayed response held students back from getting feedback, thus stopped them from asking for more clarification. This could happen especially with passive students. Unlike the proactive ones, they tended to search other online materials to compensate for the delay.

The lack of a video conference tool had put teaching and learning more at a disadvantage. According to **T**, he would have preferred it if he could have had a real-life communication with his students during the BL.

On the other hand, MyGuru could provide immediate feedback via online assessment tools. This *synchronicity* was mentioned by two interviewees. They saw this as the most attractive feature. One interviewee also drew attention to the use of video conference tool and felt this would be very useful if they had this on MyGuru. As **T** put it:

> *"Because I always hope and I want to what like have real life communication with my students meaning that I tell them alright, from 8 pm to 10 pm this date, this day, everyone, please be online. So, I give you the lecture I show you the video, and then we discuss through chatting, or video conferencing something like that."* – **T**

Tool: Accessibility (Teachers)

Table 69: Accessibility of MyGuru as a Tool (Teachers)

Themes	Sub-Themes	Dimensions	P	M
Accessibility	Access	Hardware/Technical	4	4
		Internet (SES- affordability to serve to the internet)	1	1
	Design	Weaknesses	3	8
		Strength	1	2

Table 69 discusses the third theme, **accessibility** to the tool which meant the ability to use MyGuru and the practicality or user friendliness of the tool. Most of the interviewees talked about accessibility from the perspective of *access* and *design*.

As regards access, four teacher interviewees talked about the problem of technical or hardware issues (four times). Among these issues were broken LCD, speakers, corrupted files on MyGuru, and maintenance issues of the tool itself. Besides the technical issues, Internet problems were also seen as a barrier to access with problems when students were away from the university during semester breaks. Perhaps due to geographical coverage, some students claimed that they could not access to MyGuru when they went back to their hometown.

With regard to the *design*, strengths and weaknesses became sub-themes — the frequency with which weaknesses were mentioned (eight times by three teacher interviewees) outweighed the frequency of mentions of strengths. Generally, weaknesses revolved around the absence of teleconference and chatting platform, certain software being easily outdated, limited collaboration features, less user friendly of online assessment, restricted outsource sharing and unattractive interface of MyGuru.

On the other hand, the strength of the design was mentioned twice by one teacher interviewee. Although the platform did not support indirect outsource of media integration, **T** mentioned that a Blackboard application could be embedded on MyGuru forum. The use of Blackboard (a VLE tool) on MyGuru had made the forum a lot easier to follow. **T** further pointed out that the only thing he liked about MyGuru was the auto online assessment grading.

Tool: Other tools (Teachers)

Table 70: Other Tools aside MyGuru as a Main Tool (Teachers)

Theme	Sub-themes	P	M
Other online tools	Types	5	7
	Purposes	5	5

Finally, the last theme for tools in Table 70 briefly considers comments on **other tools** that were used by the teachers.

Five teachers shared *other online tools* that they had tried and used during their BL sessions. From the five interviews, seven online tools were gathered, and they were Kahoot, Thin Client, WhatsApp, Hot Potato, Prezi, YouTube and MyLine. Some of these tools were used as technical support for their teaching, for instance, the Thin Client. Other online tools were used to teach language and made the learning more interesting. Finally, some tools were used because they seemed more accessible than MyGuru. For example, WhatsApp tool was used mainly for the purpose of communication as it was more convenient and could be easily accessed from their smartphones. **W** recalled her experience as:

> *"…But then again I can use WhatsApp group. I've been using that last week because last week my class… so last Monday message the WhatsApp group, these are the rules and regulations…"* – **W**

W preferred using the WhatsApp tool as the message could be conveyed faster and it was more convenient for her and her students.

Subject

Subject is the second element in the activity theory. Subject refers to an individual or a group of people who use the tool in the activity system. Subject was extracted 64 times altogether, and five themes were developed: **behavioural**, **affective**, **motivation to teach English** and **to use MyGuru**, **orientation to development** and **teaching structures**.

Subject: Behavioural (Teachers)

Table 71: Behavioural of Subject (Teachers)

Themes	Sub-themes	Dimensions	P	M
Behavioural	Knowledge and skills		4	14
	Attitudes		4	8
	External Drives		3	4

Table 71 presents theme one: **behavioural** in relation to MyGuru and the competency levels that was required to use the tool. Three key sub-themes were extracted which were: *knowledge and skills; attitudes*; and *external drives*.

Firstly, *knowledge and skills* were mentioned by four interviewees and extracted 14 times. The general tone from the four teachers indicated that they mostly considered themselves as competent users of the computer and one teacher, **T**, mentioned that he knew how to use other applications that could be integrated into a presentation on MyGuru. For example, he recorded his own listening materials although he was at first uncertain on how to do that.

However, when it came to the knowledge and skills of using MyGuru, and despite describing MyGuru as an easy platform to be used, two teachers, **V** and **W**, shared their frustration with the difficulties they faced when they wanted to embed website materials, for example, YouTube videos on the platform. They did not succeed in doing this though they believed it was possible. Sometimes, they felt overwhelmed with the demand for teaching preparation and did not have time to develop their knowledge of the tool. **V** put it as:

> *"…preparing the material, it could be a hassle. Preparing a material in which sometimes you picture your notes, to be something like this. But in the end, because you are not familiar with the feature on the platform, so it turned out to be something else"* – **V**

In the same vein, **W** was unsure how she could monitor her students in the online forum. In one example, she also had trouble designing different formats of questions and overly relied on multiple choice questions.

> *"…to use the online assessment. So, of course I would like for example I need to do some exercises on adverbs and adjectives, so I would be like writing the exercises based on the RI, with that application and so forth. But the challenge for myself is that, but for me personally I find it hard for me to use different kind of questions. For me, all I've been doing it now, I keep using the ABCD."* – **V**

In short, MyGuru did not place an overwhelming demand on their technical knowledge and skills but there were annoying features in it, leading to frustration.

Secondly, with regards to the teachers' *attitudes,* the overall picture was that most teachers were able to explain how they had used MyGuru for teaching. The most common usage of the tool was to upload notes on the general information section. **Y** viewed some of the videos first before selecting them for teaching and learning

purposes while **V** provided students with online activities by creating questions using the assessment function. The latter was also frequently used by other teachers when they shared how they had used MyGuru. As we see later, this could suggest the acceptance of the tool by the teachers and be evidence of utilisation of MyGuru.

Thirdly, *external drives* were the push factors that had influenced them in using BL approach. According to three teachers, the main reasons they opted for BL were because of its compulsory status as a part of the annual work target (AWT) at the end of each year, as well as a direct order received from the higher management of the faculty. This order was given primarily to help assist students by providing extra exercises as well as a medium for monitoring their learning progress.

Subject: Affective (Teachers)

Table 72: Affective of Subject (Teachers)

Theme	Sub-themes	P	M
Affective	Emotions	6	7
	Acceptance	4	6

The theme '**affective**' in Table 72 concerned teachers' emotions when using MyGuru and this was talked about from the perspective of *emotions*, and *acceptance*.

When the teacher talked about MyGuru, four of them described inhibiting while two spoke about encouraging *emotions*. These include nervousness about using the tool for the first time, the sense of intimidation due to lack of exposure to the tool, the fear of achieving the learning objectives with the tool and the failing to use the tool. These inhibiting emotions were expressed modestly, and in practice, they disappeared once they got going with the tool. This suggested that having such feelings was a common experience at first.

> *"I find it intimidating in the first place. I feel like it's going to be hard, it's going to be this, it's going to be that. I think that it is not doable, and whatnot"* –**T**

In contrast, two teachers spoke fondly of their emotions when using the tool. For instance, **V** and **Y** perceived MyGuru as exciting though they would have been happier if there were no technical issues when using it. As **Y** shared:

> *"My feeling is I feel I think I can say that I'm happy to use it."* – **Y**

The affective domain was also talked about regarding teachers' *acceptance* of MyGuru as one of their teaching tools. In general, the level of acceptance was mixed. No one was out and out resistent, and everybody could see some benefits. Three teachers **U**, **S** and **X** had a mixed opinion for this. The use of MyGuru was seen more as a burden, MyGuru was seen as an option, but not a requirement. **X** revealed her preference as:

> *"I guess, the thing that I like the most is the fact that I have a real communication with my students, during the teaching and learning process. Because perhaps might be because I'm a very conventional type of teacher where I believe knowledge is passed through communication; verbal communication and non-verbal communication. And blended all those materials like the technology is just a supplement. The main point is just the communication. The moment I come in into class and having communication with my students during the teaching and learning process is the best thing I guess, as for me,"* – **X**

However, one teacher, **Y**, seemed to have a much more positive acceptance towards MyGuru or other technology in their teaching. He believed that a mixture of both f2f and online provision could offer the best of both worlds.

Subject: Motivation (Teachers)

Table 73: Motivations to teach English and to use MyGuru (Teachers)

Theme	Sub-themes	P	M
Motivation to teach English	Intrinsic Extrinsic	7 3	15 4
Motivation to use MyGuru	Intrinsic	2	2

Theme two in Table 73 is about the **motivation** to teach English and to use MyGuru. This motivation was more regarding what inspired them to become language teachers and what encouraged them to make use of MyGuru. For this, I managed to group the motivation to teach English into two types: *intrinsic*; and *extrinsic*; while *intrinsic* for motivation to use MyGuru.

It seems the passion of being a teacher comes from within oneself. This pattern could be seen from all seven teachers that their desire to teach was driven by their innate passion. This *intrinsic* motivation was expressed in a concern to be well-prepared; to

make students' learning their teachers' priority; and to go beyond what a teacher normally does.

Meanwhile, three teachers talked about how their motivation was geared towards *extrinsic* rewards. In one example, performance grades would be given to each teacher at the end of the year. This was part of the teachers' annual work target (AWT). This AWT was a requirement and explained why the language teachers had to utilise MyGuru in their teaching and learning.

In terms of motivation to use MyGuru, it seemed that two teachers were *intrinsically* motivated to use the tool. Key to this, intrinsic motivation was to 'keep up with today's generation' who were born and raised in a technology rich era.

Subject: Orientation to development (Teachers)

Table 74: Orientation to Development of Subject (Teachers)

Theme	Sub-themes	P	M
Orientation to development	Proactive in finding solutions	2	3
	Demotivated when facing problems	1	4
	Procrastinator when seeking help	1	1

Theme three in Table 74 expands on the **orientation to development** of teachers on how they developed themselves by using the tool. It covers being *proactive in finding solutions; demotivated when facing problems;* and *procrastinator when seeking help*.

Amongst the three sub-themes, *proactive in finding solutions* was talked about by two teachers, **T** and **W** who used trial and error in creating activities on MyGuru.

Being *demotivated when facing problems* was emphasised by **Y** who expressed his opinion in exasperation:

> *"For MyGuru, they got the system. But as I said to you, when I try to call the ICT officer, I send my report on the MyGuru, but until now, I still face the same problem. I think that after two or three months, I will stop using the system. Because I don't want to use it anymore because there's a lot of problems."* – **Y**

He mentioned how demotivated he was when he did not receive the assistance he requested.

W also perceived herself as a *procrastinator when seeking help*. Not only did the delay not solve her problems but it had stopped her from using the tool.

Subject: Teaching Structures (Teachers)

Table 75: Teaching Structures of Subject (Teachers)

Theme	P	M
Teaching structures	3	5

Finally, **teaching structures** as illustrated in Table covers teachers' delivery methods in the classroom. There was a similar pattern of *teaching structures* identified. The general approach was that the teacher would follow the scheme of work, give a lecture followed by enrichment activities. A discussion in between the lecture was sometimes initiated. The activities would normally be conducted either in individual or group work. The after-class activity would usually involve independent learning provided by the teachers and this where MyGuru took place. Teaching structure was not discussed in depth in this finding (see Observation for more).

Objects

Object is the third element in Activity Theory. Object refers to a motive or purpose that is oriented towards activities. Overall, object was extracted 24 times, and three recurring key themes were identified: **keeping a pragmatic orientation**; **developing a communicative competence**; and **addressing instrumental goals**.

Objects: Keeping a Pragmatic Orientation (Teachers)

Table 76: Keeping a Pragmatic Orientation as Object (Teachers)

Theme	P	M
Keeping a pragmatic orientation	6	13

Three key ideas were obtained from thirteen examples. Firstly, the teacher had to teach according to the fixed curriculum. Secondly, although teachers needed to go by the book, they also had to have realistic expectations by having in mind that students were different in abilities and orientations. Thus, not all stated learning outcomes might be attainable for all students. Thirdly, teachers had to adapt. This adaptation could be either via well-thought-out planning or sometimes just by improvising in the class itself.

Teachers had to be pragmatic in their classroom since students were differentiated. One teacher said that he believed students who had majored in English course had a higher chance of achieving stated learning objectives as compared to students from other courses such as Sports Science or Engineering. X said she had to give many exercises for students with low proficiency levels so that she could achieve what she had aimed for in the lesson. These differences were taken into consideration and approaches were adjusted so that the learning objective could be attainable.

Objects: Developing Communicative Competence (Teachers)

Table 77: Developing a Communicative Competence as Object (Teachers)

Themes	P	M
Developing a communicative competence	5	6

Meanwhile, theme two in Table 77 covers **communication competency**. There was clearly a goal for teachers. For example, all the teachers talked about using the language. Teachers wanted their students to feel comfortable and have the right attitude to speaking. Communicative competence was in opposition to instrumental goals, such as finding a job. However, it was different to the instrumental goal which was theme three. **S** shared:

> *"So, basically when they finished or when they completed this EP4, I hope that most of the students would have a very good command of English. At least they can converse in a comfortably, not really like, we know, before this, they would be afraid like to use the language, maybe after this, they would be very comfortable of using the language."* – **S**

When the teachers talked about communicative competence, they generally spoke about competence to operate in the real world or in a context where they might need to use English for some purpose. They did not explicitly see communicative competence in

relation to the curriculum, textbook or accuracy. But here it was a tension in that teachers did not test communicative competence in the curriculum.

Objects: Addressing Instrumental Goals (Teachers)

Table 78: Addressing Instrumental Goals as Object (Teachers)

Theme	P	M
Addressing instrumental goals	2	3

Table 78 shows that teachers also realised that students had more **instrumental goals** which they had to address as teachers. Two teachers mentioned how important it was for students to pass to the next level and their 'as-long-as-pass' attitude.

The other purpose of empowering university students with English acquisition was seen by some students as unimportant. As **Y** and **X** shared:

> *"…for EP2, it's a part of university courses, so some student they think that the university courses is not important as what as their core course. And then they just want to pass."* – **Y**

> *"so sometimes they tend to feel that as long as I have C+, as long as I pass, it's okay."* – **X**

Rules

Rules are the guidelines and conventions that regulate within an activity system. In respect to rules, a total of 56 extracts were identified, and two significant themes were developed which included: **syllabus** and **policy on MyGuru.**

Rules: Syllabus (Teachers)

Table 79: Syllabus as Rules (Teachers)

Themes	Sub-themes	P	M
Syllabus	Grammatically focused	4	6
	Appropriate, engaging syllabus	4	4
	Questioning suitability (levels)	3	5
	Questioning suitability (Contents)	3	3
	Questioning of the		

Themes	Sub-themes	P	M
	syllabus (assessments)	1	2

Regarding the **syllabus** in Table 79, another five sub-themes were developed: *grammatically focused; appropriate engaging syllabus, questioning suitability (levels)*, *questioning suitability (contents)*, and *questioning of the syllabus (assessments)*.

In respect to the first sub-theme, teachers' comments were critical – the syllabus was too *grammatically focused*. This was made especially in reference to the old scheme of work which was still used by the teachers. Grammar was the main skill. For instance, exercises on MyGuru were mainly grammar reinforcement. Thus, one teacher said MyGuru could address what was lacking from the syllabus, for example a platform to initiate discussion between the students. Although grammar was the focus of the syllabus, it was taught at the surface level which, according to **T**, was insufficient, as he put it:

> *"I find it the module thus not help in helping students to scaffold the understanding of certain topic because the module was somehow quite haywire. In one chapter, you have all sort of grammar parts. It just touch and go, touch and go touch and go"* – **T**

Due to grammar being taught in isolation, three from the four teachers expressed their 'uneasy feelings' of having grammar as the main focus.

Regarding the second sub-theme, the *appropriate and engaging syllabus* was talked about on four occasions by four teachers in agreement that the new module was better because it carried a similar weighting for each of the four language skills (R, S, L and W). Along with that, debate was also included as one of the activities in the syllabus. Having a debate in the class had attracted students' attention mainly because they deemed it challenging yet interesting and refreshing.

Concerning the third sub-theme, teachers *questioned the difficulty level* of the activities conducted on MyGuru. Five occurrences by three teachers showed that teachers faced difficulties in finding suitable exercises for students especially since the class was filled with students of varied proficiency levels. For example, **Y** shared his experience of

looking for a video that had an intermediate English level for his students. Most of the videos he found were at advanced level:

> *"the video is English, but the level of it. If the audio or the native speaker itself, the way they say, the way they talk is quite fast, so it will be quite difficult for them to understand. And then some will use they use what we called as the language is not suitable for them to use maybe harsh word, maybe the word is very bombastic, very high-level word, even though they need to know the word. For me, is better for them to use simple word rather than complicated word or the complex word"* – **Y**

Regarding the fourth sub-theme, teachers also *questioned the content* of *the syllabus*. Some unsuitable content was found in the activities especially when teachers used other online resources in their teaching. Hence, some students, particularly below the intermediate proficiency levels, had difficulty grasping the input partly because of culture differences between the students and the native speakers of English. To worsen the situation, unorganised content of the syllabus made it even more difficult for students to have a better understanding while harder for teachers to deliver it well. As **W** put it:

> *"…somehow everything is being stuffed into the module. So, me as a teacher, even me myself, when I try to read all the information, read the exercises and the notes, I get confused. Because everything has been cramped."* – **W**

Finally, the last sub-theme was about teachers casting doubt on the *syllabus assessment*. There were four types of assessment: a quiz, a test, an assignment and a final examination. The quiz, test and assignment would usually carry 60 percent of the overall marks meanwhile another 40 percent was allocated for the final exam. These assessments were seen as a fair means to assess students' performance. However, **U** thought that there were too many assessments to carry out within a semester and the 14 weeks given were insufficient for the completion of all assignments. She felt that the number of assignments should be reduced. Having fewer assignments could be covered by increasing marks for the remaining assignments proportionally.

Rules: Policy on MyGuru (Teachers)

Table 80: MyGuru Policy as Rules (Teachers)

Themes	Sub-themes	P	M
Policy on MyGuru	Requirement	5	15
	No clear guidelines on using BL	5	13
	Outdated manual	1	1

Table 80 presents rules: **policy on MyGuru** with three sub-themes: *requirement; no clear guidelines on using BL;* and *outdated manual.*

The main idea for the sub-theme of the *requirement* was that BL on MyGuru platform was compulsory for all teachers. Five teachers said they had to use MyGuru because it was an order given by the university although there were no official documents nor circular memo about this. BL contributed a small part of marks to their working performance. Two other teachers did not say anything about this. It was unclear whether both of them were aware of this. Meanwhile **U** said, to her knowledge, the use of BL on MyGuru was not compulsory.

The contradiction in views could be because there were *no clear guidelines about the use of BL* with regards to the implementation as well as the technical usage. **X** said the higher management always reminded her about the things they need to achieve, and this included the use of BL. **T** reaffirmed **X**'s statement by saying:

> *"I've been told that we are encouraged to do BL, 50% of the total teaching hours, so if 50% it should be seven weeks of BL and seven weeks of f2f. But, all is done verbally. I don't remember that they provide us the guideline. I don't remember that they provide us with like some sort of documents saying that we need to do this, and that, this and that. Just words of mouth."* – **T**

The other four teachers had similar views with regards to lack of information provided for BL implementation. Although the other two teachers did not talk about this directly, judging from the examples given, it seemed that they also shared the same opinions.

With regard to the technical use of BL, there was general information about how to use the platform in pdf format, but the *manual* was seen as *outdated* by **W**. She gave one

example regarding how she prepared exercises for her students online and when she sought for help from the notes. She put it as:

> *"There was no information about how to write questions for fill in the blanks. So, I tend to go back to using ABCD. I would love to have the students provide their own answers rather than me providing them the options of answers. It's also not up-to-date.* – **W**

Division of labour

Division of labour is the fifth element in Activity Theory. Division of labour refers to the internal and external taskforce of an organisation or activity that influences the transformation of the object into the outcome. Division of labour was extracted 82 times. For this element, one theme was identified: the **role of teachers.**

Division of labour: Role of Teachers (Teachers)

Table 81: Role of Teachers as Division of Labour (Teachers)

Themes	Sub-themes/dimensions	P	M
Role of teachers	Fulfilling teaching requirements	7	49
	Becoming course coordinator	7	15
	Attending training for CPD	6	9
	Managing time	5	11

Table 81 covers the first theme: **the role of teachers**, about what a teacher does and further expanded into four sub-themes; *fulfilling teaching requirements; becoming course coordinator; attending training for CPD* and *managing time.*

With regards to *fulfilling teaching requirements*, all seven teachers shared what they did in their teaching (49 times). In general, uploading notes, preparing online assessments and quizzes were among their common tasks. Teachers' role also required them to prepare lessons and, to mark papers and assignments. When problems regarding the lesson occurred, teachers would provide relevant solutions to address the issues. Since teachers were teaching students with mixed proficiency levels in a class, some of them had to simplify difficult questions to accommodate lower proficiency level of students. As **X** put it:

> *"when the assignments that I gave to students are too complex for them to digest, so what I do is, I break it down. So, I'll break it down into simpler exercises, a simulation, so that the*

students can see it. So, I fragmentise the exercises. So, that when the students can see the actual purpose of the exercises, they can actually do it and by the next exercises they can do it by themselves" – **X**

Another role was seen as *becoming course coordinator*. Among the seven teachers, only four of them were course coordinators for English subjects in the current semester. As a coordinator, this role required them to prepare the teaching outlines for both classroom and MyGuru contexts, to upload instructional lesson plans on MyGuru, to disseminate teaching assessment tasks, to prepare and vet exam questions, to give a briefing and to monitor teaching of subordinators as well. Despite the given outlines, teachers were flexible in how they executed these tasks. Some teachers were able to cope with the duty as the course coordinator, but some felt otherwise.

Besides that, teachers also needed to *fulfil CPD* such as *attending trainings* and meetings. There were different training events offered throughout the year which and it was compulsory for the teachers to complete a certain number of training hours.

Time management was often associated with workload. This was the case for **V** who mentioned three times throughout his entire interview his inability to efficiently manage his time. **W** also shared that she could not spare some of her time to learn to use MyGuru and put the blame on herself. Time management had been quite an issue for five teachers not only because the teachers had to juggle with their teaching workload, but also, they had other administration work especially when one assumed more than one role in some semesters. Despite that, **S** was one of the five teachers who saw more opportunities with MyGuru and deemed the tool as a source of help to address her time management.

Community

Community is the sixth element in Activity Theory. Community refers to a social context where the activity is carried out. Community was extracted 82 times and was divided into three themes: **teachers**; **students**; and **ICT support staff**.

Community: Teacher (Teachers)

Table 82: Teacher Community (Teachers)

Themes	Sub-themes	P	M
Teachers	Sources of help (with MyGuru)	4	7

In understanding the teacher community as a whole, further elaboration regarding what the teachers were trying to achieve, can be found in the subject element as seen in Table 82. Here, teacher community was only discussed with regard to other teachers. Firstly, the theme for **teachers** was divided into one sub-theme: *sources of help with MyGuru*.

Overall, it was clear that in the community, people could offer help and these people were peers and friends rather than people whose official role was to support them. Four teachers said that they sought help from their more experienced colleagues instead of the ICT officers or MyGuru support staff. This was because they trusted their peers and believed they could help solve the problems. For instance, **W** even gave her password to her colleagues whom she thought were knowledgeable in IT skills and in MyGuru in particular:

> *"Meaning that, if I have difficulties in uploading notes, I would call my friend. I will call them to help me. Z is my colleagues, he is very knowledgeable in IT. And then other my colleague too, Miss. H. So, these people would help me, yeah."* – **W**

Among the teachers, only **W** felt she had marked difficulties in using MyGuru, but overall, most had problems they could relatively easily solve with the help of peers.

Community: Students (Teachers)

Table 83: Teachers' Views on Student Community (Teachers)

Themes	Sub-themes	Dimensions	P	M
Students	Roles	Follow syllabus	5	6
		Give feedback	5	7
	Differentiated natures	Orientation to Learning	7	14
		Motivation to learning	5	8
		English		
	Comfortable with ICT	Access	4	7
		Skills	4	6

Following the focus on teachers, Table 83 shows another three sub-themes emerged from the teachers' point of view about their **students**: *roles*; *differentiated natures;* and *comfortable with ICT*.

In respect to the first sub-theme, roles, two dimensions were developed to *follow the syllabus* and *give feedback*. The overarching ideas of roles of the students were to follow the syllabus given and at the same time to provide feedback to the teacher, so the teachers know how to develop their curriculum. However, following the syllabus was seen as intensive because there was a lot to cover. Thus, some students inevitably felt overburdened.

The second characteristic of the student community, from the perspective of the teachers, was its *differentiated nature*, this was divided into two other dimensions: *orientation to learning* and the *motivation to learn English*.

The first dimension, orientation to learning revealed there were three different types of students in the classes: *independent*; *reticent* and *instrumental*. Among these groups, *independent* students were frequently mentioned by teachers. Independent students were found to actively participate in all activities including doing the assignment and answering exam questions. They were also responsible for their learning and showed good leadership skills for those who assumed leader's role. Some were able to support their peers throughout the course. Nevertheless, students who possessed below than average proficiency level had difficulties in becoming independent students. These students were seen to need extra guidance to assist them in the learning. In contrast, some students showed *reticence* in learning. These were found to be more reserved in the class mostly due to fear of making mistakes in English and being laughed at by their friends in front of others. As for the third, around a third of the students were seen as *instrumental* goals in their learning. This group of students saw an English course as a compulsory requirement upon graduation. Thus, passing the course with at least C grade was sufficient for them.

The second dimension, *motivation to learn English*, divided students into two different groups: *motivated* and *unmotivated* students. The general tone for this sub-theme showed students who were highly *motivated* to learn English were those who took English as their major course, such as the TESL programme. *Unmotivated* students usually treated the English course as unimportant as compared to their other subjects. Some students

did not even bother to attempt their assignments or exercises given in class, let alone doing activities on MyGuru. The students justified this by saying they had to complete too many other assignments aside from English. As **T** put it:

> *"But it's different to the major students. For e.g. the content subject, the diploma students, they will do it. For English Proficiency classes, that's the problem. They are different. Maybe their mindset towards their subjects. Their attitudes towards English"* – **T**

The subtheme of being *comfortable with ICT* was divided into two dimensions: *access* to MyGuru; and *skills* to using technology. Most students had access to hardware such as computers, laptops, tablets and smartphones. However, three teachers said despite the easy access to the hardware, the unstable Internet connection disrupted the use of MyGuru. This disruption had affected students' learning.

Students were seen by teachers as a generation who found *comfort in using technology*. They assumed students did not have a problem using MyGuru since it was straightforward.

Community: MyGuru Support Staff (Teachers)

Table 84: Teachers' Views on MyGuru Support Staff Community (Teachers)

Themes	Sub-theme	Dimensions	P	M
MyGuru support staff	Assistance	Support	6	19
		Training	6	8

After students and teachers, **MyGuru support staff** were the third theme that described the community element as shown in Table 84. *Assistance* was the most raised sub-theme from seven interviews and was further divided into two dimensions: *support* and *training*.

One of the MyGuru support staff's roles was to provide relevant support to the university students and staff with regards to technology. All teachers had mixed opinions regarding the support they received.

U, **W** and **X** described their experiences in receiving support as sufficient. According to them, the MyGuru support staff and technician staff were helpful when they requested assistance and help was given within an acceptable timeframe. Some teachers disagreed. For example, **S**, **V** and **Y** said insufficient support was received for the semester. **Y** even questioned the support staff competency in providing a solution to the problems that

he faced — both **S** and **Y** were in agreement that there was a delay in receiving help. **T** did not talk about support provided by ICT because he usually solved the problem by himself or sought help from his colleagues.

In relation to training, three teachers, **T**, **V** and **W** described the training of using MyGuru as insufficient or non-existent. **T** for instance said he did not recall attending any training on using MyGuru, although there was training provided by the ICT department. **W**, on the other hand, said the content of the training was superficial. When she came out with a more complex question regarding MyGuru, the trainer was not able to answer it. **V** also wished that he could have more training so that he could become a more competent user of MyGuru.

Outcomes

Outcome, the last element in Activity Theory, is the result or effect of an action within a system. For the outcome, a total of 109 extracts were recorded and further divided into another five sub-themes which were: **behavioural**; **affective**; **cognitive**; **achievement/performance**; and **challenges**.

Behavioural Outcomes (Teachers)

Table 85: Behavioural Outcomes (Teachers)

Themes	Teachers	P	M	Students	P	M
Behavioural	Used MyGuru	7	26	More spoken	2	6
	Extend use	5	9	text		
	Preparation of teaching	1	4	communication		
				Better prepared (Ready in advance)	4	12

Table 85 described this element from two different perspectives: the outcomes for teachers and the perceived outcomes for students.

Teachers described the way they *used MyGuru* in the sense of which features they used the most and the kind of activities they usually used in platform for. Most teachers used announcement, forum, online assessments, submission of online assessment as well as private messaging. These findings were consistent with the quantitative data (see Figure 11). There were other applications which were not used at all by the teachers mostly

because they were not relevant to their activities or sometimes, they did not know of them. The frequency use varied each semester. There was varied use but rarely extensive use of MyGuru.

As for the online assessment, there were several types of activities available for teachers, provided they developed the activities themselves. Usually, they had to create supplementary activities on MyGuru because the module did not suit the students' levels. Students would get prompt feedback or results after completing the online exercises. Some teachers took these marks as a part of the course work assessment.

The reasons why they used MyGuru were to either *extend the teaching* beyond the four walls of their classroom due to insufficient classroom hours or just simply classroom replacement. Due to many syllabi to be covered within a limited time, MyGuru was seen as the best alternative for classroom extension. For the teachers, this was considered as a part of the BL mode.

When asked why they infrequently used MyGuru in their teaching, the answer given was the hassle they faced with regard to the *teaching preparation*. It was understood that not all teachers were computer savvy, thus, to step out from their comfort zone in coming up with their teaching materials using MyGuru was seen as the least preferred option.

Although teachers saw MyGuru as a disruption to their teaching, alternately, they saw the potential that MyGuru had for their students. For instance, two teachers said that through the use of MyGuru *more spoken text communication* had been initiated. In the classroom, students were more reticent (see Community-Teachers), but during the online forum, they would get involved in the activities. This in return had also changed students' behaviour towards their teachers too because they wanted to respond during the in-class activities.

Affective Outcomes (Teachers)

Table 86: Affective Outcomes (Teachers)

Themes	Teachers	P	M	Students	P	M
Affective	Felt BL as a burden due to technical error and workload	4	4	Boost self-confidence	2	4
				Reduce anxiety/stress levels	1	1
				More open in sharing opinions	1	1

Table 86 presents the affective outcomes arising from the use of BL. As for the teachers, surprisingly, it was found that teachers deemed BL more as a burden rather than a tool to assist their teaching. These feeling was triggered by some technical issues using MyGuru and also workload. However, the perception of students was that MyGuru seemed that the use of BL made them feel more confident to take part not only in the online activities but also in the classroom activities. As **V** put it:

> *"Yeah, definitely they boost their self-confidence because when I said online forum, it will definitely help them, you know, to speak better because they are used to it. In class, they will definitely not want to open their mouth and speak, because they are not used to, but if I do online forum, they are used to it. They somehow, they actually they are brave enough to speak in class. So, I think they have learnt to gain their self-confidence, and they think that because even though do not see each other physically, because of the online forum, as if the class is twice or thrice per week even though it is only once a week"* – **V**

Another significant difference mentioned by the teachers was that students felt more relaxed and less anxious and stressed out because BL allowed them to learn continuously. In addition, students tended to become more open in expressing their ideas and thoughts during the lesson due to the authentic materials used for teaching. Teachers seemed confident to conclude that their students liked the BL as it could also help them to do extra exercises despite being burdened with other assignments.

Cognitive Outcomes (Teachers)

Table 87: Cognitive Outcomes (Teachers)

Themes	Teachers	P	M	Students	P	M
Cognitive	Challenged to rethink teaching	1	2	Students were more familiar with the use of gadgets	1	1
	Trigger to consider students' different levels	2	2	Students liked BL for extra exercises	1	1
	Not challenged to rethink teaching	1	1			
	Professional development	1	2			

Table 87 covers the **cognitive** domain. Teachers perceived BL as a challenge to *rethink* their *teaching*. As **S** said:

> *"Creating activities not really a problem. It is just that sometimes, you need to like sit down and generate ideas. So, you have to find ideas…., I really have to organise my time, do, sit down and concentrate whatever that I would like to upload to them. Because it needs to be constructed really well for them. So that they would understand because we are not like because sometimes of the students can take f2f instructions, some of them they would be very love all this online thing."* – **S**

Re-thinking teaching was not the only problem; teachers also had to *adapt* their *teaching methods* based on their students' *proficiency levels*. However, the process could be overwhelming for some teachers as they need more time. In contrast, there was one teacher who said she just used the BL without doing much thinking as her main objective was to obtain the BL status. As **W** explained:

> *"When I was a coordinator, I was just putting these things, without thinking. Because I just want to achieve the blended mode status. Without actually thinking, yeah. Because I was clueless. I, some of us maybe [sic] about this. Because it was somehow, we were rushed into it. They maybe again, like I said, maybe we need a proper training about BL. From faculty to faculty. Just to inform us how to do this. Because I do not want to like blindly put things in MyGuru just to achieve blended mode. But I don't know how to use it. Waste of time."* – **W**

On a more positive note, one teacher believed BL had contributed to *her professional development* as she realised becoming a computer competent teacher was an added value to her profession.

From the teachers' perspective, students were deemed to be *more familiar* with the use of *different types of gadgets*. It was believed that this could assist the students to integrate the BL into their learning with more ease.

Achievement/ Performance Outcomes (Teachers)

Table 88: Achievement/Performance Outcomes (Teachers)

Themes	Teachers	P	M	Students	P	M
Achievement/ Performance	No guidelines to measure online performance	2	2	Developed particular skills- reading, writing, and oral fluency	3	4
				Helped achieve in tests	2	3
				Helped meet learning objectives/ expectations	1	2

Achievement/performance was another outcome as shown in Table 88. For this theme, two teachers said that they *did not know how to measure students' online performance* as there were no guidelines nor rubric provided. However, one teacher said he created his own marking rubric in order to measure the students' participation in the online forum.

Teachers said that BL enabled students *to develop their skills*, in particular, reading, writing as well as oral fluency. Students also seemed *to have scored necessary marks* in tests and assignments. Thus the *learning objectives* were perceived as successfully *achieved*.

Challenges (Teachers)

Table 89: Challenges as Outcomes (Teachers)

Themes	Teachers	P	M	Students	P	M
Shortcomings	Lack of technology skills	3	5	Some skills difficult to address	3	4
	Time constraint	4	4	Too dependent on the teachers	1	1
	Little influence over the syllabus/design	3	4	The propensity to copy and paste	1	1
	Difficult to cater to different levels	1	1			

Themes	Teachers	P	M	Students	P	M
	Technical issues (reliability)	1	2			
	Difficulty in explaining online	1	1			
	No communication between teachers online	1	2			

Table 89 shows another issue, the **challenges** in fully integrating BL in the English Proficiency course. For the teachers, among the challenges, *lack of technology skills* had hindered them from coming out with appropriate online teaching materials for the MyGuru platform.

With too many teaching hours preparing materials with limited skills, time was seen as a huge obstacle for some to fulfil the teaching requirements. Ssometimes, the content of the syllabus was inappropriate for some students due to *differences in proficiency levels,* but they felt they had *little influence over the syllabus*.

S felt she had *lacked the skill to explain complex issues online*. This skill was not taught, nor was training provided for the teachers. It was also said that there was no access for other teachers to take part in the online course except for the course instructor. Hence, the only online interaction that could be seen was between the students and teacher of that particular course, but *no communication among the teachers* who taught the same course.

From the teachers' perspectives, some of the students' *language skills* such as writing, and speaking were *difficult to address*. This was not only because of the limited features on MyGuru but also the syllabus that focuses too much on grammar (see Rules- Teachers). Students were mainly dependent on teachers when it came to learning English. They felt that they *could not* try and *become independent* students. What made it worse was that during the online learning, despite the teachers having initiated online forums, students had a *propensity to copy and paste* their responses. **S** claimed that students did not try to showcase their understanding by composing texts themselves.

MyGuru Support Staff Interviews

Tool

From the two sets of MyGuru support staff interviews, 20 extracts were tagged in regard to tools. From the extracts, four major themes were developed: **affordances**; **development**; **characteristic features**; and **accessibility**.

Tool: Affordances (MyGuru Support Staff)

Table 90: Affordance of MyGuru as a Tool (MyGuru Support Staff)

Themes	Sub-themes	Dimensions	P	M
Affordances	Efficiency of resource	Time, money and physical resource savings	1	6
	Multimedia	Interaction	1	2
	Extending teaching	Preparation in advance	1	1

The first theme, **affordances** in Table 90 covers what the MyGuru support staff felt the tool, MyGuru, could be used for. For this, one sub-theme, *efficiency of resource* emerged and was talked in terms of time, money and physical resource savings.

With regard the efficiency of resources, **B** regarded MyGuru as providing savings in terms of time, and money as well as resources. Students could save time as they did not need to go to the lecturers' room in order to submit their assignments. On top of that, academic staff could quickly send feedback and receive amendments within a more just in time approach. Online submission could also save students from spending money on printing and binding.

In respect to teaching efficiency, B thought that MyGuru could benefit both students and lecturers as material could be stored and easily accessed.

> *"If I were a lecturer, I would love the platform! I'd just need to do everything online. I wouldn't have to stack files on the floor like they used to. I could keep my teaching materials online. Like giving marks, I can always give it online. Just enter the marks or upload it directly. Then we can also share the marks on MySis."* – **B**

The second sub-theme covered **interaction**. Before MyGuru was upgraded, the platform only provided one-way communication for example news of classroom changes. However, to keep abreast with the technology, the MyGuru team had upgraded the system and enabled two-way communication: teacher-student, students-teacher, student-student. This allowed individual and group communication.

In regard to the final sub-theme, **extending teaching**, A explained how teachers could prepare their teaching in advance in order for students to access materials before their teaching session. **A** said:

> *"I think the most significant impact is that the lecturers can upload their teaching materials online before the semester starts. They can also upload the content, forum and even set the date when they want the forum to be activated."* – **A**

Tool: Development (MyGuru Support Staff)

Table 91: Development of MyGuru as a Tool (MyGuru Support Staff)

Themes	Sub-Themes	P	M
Development	Skills	2	3
	Keeping up with technology advancement	1	2

Table 91 shows the second theme, **development**, and this was discussed regarding *skills* and *keeping up with technology advancement*.

A and **B** explained they were the ones who worked on MyGuru from the beginning. They had a background in computing, they could draw on their existing knowledge, and at times they were challenged to develop their skills. The extent of the challenge ranged from easy to hard. For example, a hard part involved the connection from two databases, i.e. from Oracle to Visual Basic and vice versa. In addition, when analytics were involved, they also found it very challenging to construct the right formula and to avoid as many bugs as possible. What was also challenging was to meet some of the users' request, for example, users wanted everything to be settled within a single click. **B** explained:

> *"So, to make it more user friendly is a challenge for us. Not all people are IT savvy, so simplifying seems important to these people. But, we cannot always do what they want"* – **B**

The second sub-theme, *keeping up with technology advances* was seen as a key challenge. It was frustrating because building the system took a long time, but it would end up obsolete. They had to be one step ahead while maintaining the system. With only a small team who worked on the project, this was not always possible. **B** said:

> *"We don't have enough teammates for this. Definitely it is going to need a long time. We also need more people in our group to support the project too. Developing a new platform in the long run will somehow make it become obsolete. That is the challenge. If we take one year only, that could still be okay but if more than five years, the software could be more advanced than the one we used. By the time we complete it, it already way outdated."* – **B**

Tool: Characteristic Features (MyGuru Support Staff)

Table 92: Characteristic Features (MyGuru Support Staff)

Themes	Sub-Themes	P	M
Characteristic Features	Dependency on the Internet	1	1
	Non-f2f	1	1

Table 92 displays third theme, **characteristic features** of MyGuru. This was discussed in terms of *dependency on the Internet* and *non-f2f*. The first sub-theme, *dependency on the Internet* covered the awareness that MyGuru would be affected by unstable internet connections. Lack of f2f connection was seen as the price they had to pay for the advantages of the asynchronous network.

Tool: Accessibility (MyGuru Support Staff)

Table 93: Accessibility (MyGuru Support Staff)

Themes	Sub-Themes	P	M
Accessibility	Design	1	1

Table 93 illustrates the fourth theme **accessibility.** Here *design* was the sub-theme and was discussed in terms of weaknesses. According to **A**, some of the functions were too 'simple' and MyGuru had an unattractive interface.

Subject

Subject is the second element in Activity Theory. Here the subject is defined as a group of people who developed the MyGuru system.

Six extracts were tagged, and two major themes were identified: **behavioural** and **cognitive.**

Subject: Behavioural (MyGuru Support Staff)

Table 94: Behavioural of Subject (MyGuru Support Staff)

Themes	Sub-themes	P	M
Behavioural	Developing	2	4

Theme one in Table 94 discusses **behavioural** domain towards the development of the system. The main sub-theme was *developing* MyGuru for the university students and staff. In terms of technical assistance, whenever users had difficulties, i.e. how to use the system, they were provided with help either via emails or phone calls. From the support staff point of view, they dealt with enquiries in a timely and helpful fashion. This was not always straightforward. For example, they noted the same people were asking the same questions. They were aware some users thought their problems took a long time to be resolved but **B** provided her justification as follows:

> *"I love programming. I feel fun doing it. But we have to deal with users who sometimes want their problems to be resolved quick. Not all are like that. But sometimes, they also provided delayed responses, so we cannot proceed with our work too. We cannot do everything right away because we have several things to do. So, we have to priotise them."* – **B**

However, they also noted they were disappointed that they did not get any feedback afterwards about how helpful or otherwise they had been.

Subject: Cognitive (MyGuru Support Staff)

Table 95: Cognitive of Subject (MyGuru Support Staff)

Themes	Sub-themes	P	M
Cognitive	Knowledge of BL	1	3

In respect to the cognitive theme as seen in Table 95, the staff had a good overview of what BL meant. They understood that BL could involve working and learning inside and outside of a classroom. MyGuru facilitated BL as **B** said:

> *"To achieve BL status, we have to fulfil certain features. There are five criteria. We need on MyGuru to provide course information, activities, reading materials and two others. Others, I cannot recall at the moment. In regard to the course info, we made it compulsory for lecturers to upload their IP (instructional plan) on MyGuru. If there is an IP, it is one step closer to BL status. Then, activities like a forum, or a quiz are also needed"* – **B**

Objects

Object is the third element in Activity Theory. Object refers to the motive or purpose. Ten extracts were tagged, and only one theme emerged: **keeping pragmatic goals**.

Objects: Keeping pragmatic goals (MyGuru Support Staff)

Table 96: Keeping Pragmatic Goals as Object (MyGuru Support Staff)

Themes	P	M
Keeping pragmatic goals	2	10

Keeping pragmatic goals refers to the aim of getting MyGuru working and used as shown in Table 96. MyGuru was expected to provide a system that could be used by everyone to smooth the teaching and learning process. MyGuru support staff were responsible for assisting with support and training. Support usually was given in the form of troubleshooting the system in case of errors and bugs. Training, on the other hand, was given to all lecturers and students and was more forward looking. **B** said:

> *"Usually the training is provided for new lecturers. (The existing had already had training). We will propose to the human resource department a workshop on the system that will last a couple of days. As for the students, every new intake, we will have one session for the ICT department to introduce MyGuru and other systems they should be using and how to use them"* – **B**

Rules

Rules are the fourth element in Activity Theory. A total of 15 extracts were tagged, and one main sub-theme was identified: **procedures for improvement of MyGuru**.

Rules: Procedures for Improvement of MyGuru (MyGuru Support Staff)

Table 97: Procedures for Improvement of MyGuru as Rules (MyGuru Support Staff)

Themes	P	M
Procedures for improvement of MyGuru	2	15

Table 97 shows procedures for improvement of MyGuru as the fifth theme. This was discussed regarding what the rules were that they should have followed for each stage.

Firstly, after a proposal was submitted, there would be a meeting among the team members to analyse needs especially when there was a request for a system upgrade. After that, a discussion between departments would be held and once approval was received, the next step, designing, would follow. The MyGuru team would distribute the task among team members. During the development process, a prototype would be run, and improvement would be made after each test.

After the demonstration, approval for the system to be released would be sought. Once approved, the implementation would be carried out by the team. During this phase, further amendments might take place depending on evaluation feedback. This design process was followed each semester consistently. Some problems required more time than others. For example, a hardware problem involved other stakeholders. The team needed to get approval from the administration team before they could proceed.

Division of labour

Division of labour is the fifth element in Activity Theory. Division of labour was tagged six times. For this element, two themes **inter-role** and **intra-role** were reported.

Division of labour: Inter-role (MyGuru Support Staff)

Table 98: Inter-role as Division of Labour (MyGuru Support Staff)

Themes	Sub-themes	P	M
Inter-role	Task division	2	3

The **inter-role** was about role between peers. This was talked about in the form of *task division* among the workforce (see Table 98). In the department, there were different teams responsible for different tasks. For instance, the database team had dealt with

technical issues (server) and systems. The MyGuru staff would only deal with issues related to the system development. Again, roles were differentiated within the team. One member of staff would deal with complaints. In case there was an issue that could not be resolved, all of the team would work together for a solution. However, staff said that they had too much too do. With only two members of staff who managed the system, they felt burdened with developing, implementing and maintaining the system. This was because not only were they expected to have MyGuru up and running, but they also needed to attend courses for their CPD point.

Division of labour: Intra-role (MyGuru Support Staff)

Table 99: Intra-role as Division of Labour (MyGuru Support Staff)

Themes	Sub-themes	P	M
Intra-role	Responsibilities	2	3

Table 99 shows the second theme, **intra-role (roles within oneself)**: with the sub-theme of responsibilities. The two members of staff understood the roles they had been given and had internalised the responsibilities for keeping the systems going and for training the users. They were clear in their minds what their jobs were and where their responsibilities lay.

Community

Community is the sixth element in Activity Theory. Community refers to a social context where the activity is carried out. The community was tagged nine times, and one major theme was MyGuru **users' community**.

Community: Users (MyGuru Support Staff)

Table 100: MyGuru Support Staff's Views of Users (MyGuru Support Staff)

Themes	Sub-themes	P	M
MyGuru users (teachers and students)	ICT skills	2	5
	A source of feedback	2	3
	Acceptance	2	3

Table 100 shows the **MyGuru users community** covering three key ideas *ICT skills*; *a source of feedback* and *acceptanc*e.

In regard to the first sub-theme, they focused on weaknesses in users' *ICT skills*. For example, some lecturers frequently came for help asking the same questions. They were not prepared to wait for the system to reboot. Although there was a handbook, many refused to refer to this handbook and instead contacted the MyGuru team directly. In general, they felt academic staff could be more creative in the use of MyGuru and also in other systems such as skype.

When the MyGuru staff talked about student users, they implied that they were 'IT savvy' and all of the students could be considered as IT literate.

When they talked about their own IT skills, they said that due to some limitations, it had taken a long time to come up with a stable MyGuru. The development process had to be done by phase, and a test for each completed phase would follow afterwards. This took longer than they had anticipated.

As for the second sub-theme, users were considered as a *source of feedback*. This was particularly the case when staff made amendments based on the feedback received. At the end of each semester, lecturers and students would be given an exit survey asking for their opinions and experiences of using MyGuru. From their responses, next measures could be considered.

The last sub-theme, *acceptance*, was about the users' acceptance of using MyGuru in their teaching and learning. Acceptance was only talked about in respect to lecturers, and it was felt that some staff were not accepting of technology and found MyGuru a 'burden'. They were not IT savvy and were labelled as the kind of people who were 'afraid of technology'. However, they needed to use MyGuru even if they did not want to.

> "*The seniors are usually difficult. But we keep providing them support, technical support. We are willing to help. Thank you, Allah, it was hard at first. Our university administration has started to implement BL. So, whether they like it or not, they have to use it.*" – **A**

The staff also said they received criticisms from the users when they gave suggestions on improving the system. This had made their goal more difficult to achieve. **B** said:

"The most challenging task is that how to properly educate some users on the usage. Because, in the first place, they will criticise us although we just give our suggestions to help ease the tasks. But, this kind of people always feels that it is difficult to switch on their computer, to wait for the system to start. So, to educate these people is by far the most challenging one." – **B**

Outcomes

The outcome, the last element in Activity Theory is the result or effect of an action within a system. Within the interviews, the staff explained that they had very pragmatic goals for MyGuru. The object they were trying to achieve was to have the system up and running, new staff trained and a system in place for improvement. Overall, they felt they had achieved this. They had succeeded in developing procedures for improving the system.

However, they were also aware of the shortcomings in terms of the user friendliness of the system, help and support they could provide, limited skills to meet the users' demands, lack of cooperation from the users themselves, and too few staff in the MyGuru team.

Summary

These interview findings will be described in full in the following chapter. But, in brief, students, teachers and MyGuru support staff had similar perceptions of MyGuru. All participants saw MyGuru as a tool that extended learning outside of the classroom, with some multimedia features to support interactive learning. However, MyGuru required a good connection to the Internet. In terms of subject, most teachers had the skills and confidence to use MyGuru and were willing to use it. Students were universally seen as ICT adapt and wanting to use the tool too. However, the support staff were more sceptical of teachers' skills. There was a clear sense that teachers and students needed to use MyGuru in teaching and learning although there some confusion of the suitability of the learning materials. There was a mix understanding about what that meant in practice. There were elements of a supportive community where teachers could go to their colleagues for help and students could discuss online with their peers online. A clear sense of roles of the teachers, students and MyGuru support staff could be seen. With regard to outcomes, it was clear that MyGuru was used but not frequently. Now, I

turn to the next chapter. Chapter 7 will present data triangulation and reduction from the surveys, observations and interviews.

Chapter 7: Discussion and Analysis

Introduction

This chapter discusses the findings of how BL was perceived and interpreted from the CHAT framework. This chapter is divided into two sections:

- Data triangulation and reduction
- CHAT derivation framework

Section one has seven sub-sections. The first section comments on the use of MyGuru as one of the tools in the BL context and what it offers in teaching and learning; the second section considers the subjects, i.e. who uses MyGuru in the BL context, and that includes teachers, students and MyGuru officers. The third section discusses object, which about the subjects' motives/goals in the teaching and learning context, while the fourth section is about rules that are governed within the BL context. The fifth section considers a community that surrounded each subject group, and what expectations surround teaching and learning and use of MyGuru. Section six talks about division of labour regarding the roles of people who developed the MyGuru system and the last section, outcomes, are the impacts that were identified from the BL context as a whole.

Section two, CHAT derivation framework has three sub-sections. The first section is about the foundational model derived from the data; the second section is the sporadic model while the third section is about the expansive model. The three models were explained in detail related to the BL context.

Data Triangulation and Reduction

Table 101 shows the tool, MyGuru. The key point made in respect to the tool shows there is a consistency in many cases for example the idea of the extended classroom. In some cases, it was only picked up either by one method or stakeholder. For example, teaching preparation in advance of sessions showed data was picked up from MyGuru support staff interview and observation only. This part is organised into these seven research sub-questions as follows:
Sub-Question 1: What does tool enable regarding teaching and learning?

Sub-Question 2: What are the personal and attitudinal characteristics of the subjects?
Sub-Question 3: What do subjects want to achieve in their roles?
Sub-Question 4: What expectations surround teaching and learning and the use of the tool?
Sub-Question 5: What are the roles and relationships of the subjects?
Sub-Question 6: How does the community help the subjects in achieving their objects?
Sub-Question 7: What are the different kinds of the outcomes in the activity system?

Tool: Anytime Anywhere

The tool in which I was interested was MyGuru. Other tools such as English language learning textbooks, computers, laptops, LCD projectors, smartphones, whiteboards, microphones and speakers were all used, but my focus here was on MyGuru.

As regards MyGuru, I organised the data into two parts: what does MyGuru enable and how is its use inhibited in teaching and learning. I started with what does MyGuru enable. In overview, three key ideas were identified which were anytime anywhere learning activities; access to an engaging learning space; and efficiency for teaching and learning. At the same time, I identified some ways in which these key ideas were compromised.

The findings (survey, observation, interview) in Chapter 4, 5 and 6 were collated for students, teachers and MyGuru support staff. Most of the discussion is built around what students and teachers, rather than MyGuru support staff, felt about MyGuru. Students had different roles to teachers, and where student and teacher viewpoints differ, this is shown. However, in general, students and teachers had a great deal in common even if teachers had access to some features that students did not.

Data derived from students, teachers and MyGuru support staff in Table 101 showed that MyGuru was a tool that enabled anytime and anywhere learning activities. The major opportunity MyGuru provided was to extend the classroom by enabling 'limitless' opportunities for communication and access to the material. MyGuru also enabled the connection of students and teacher through access to a web of material and communication. Students could use the tool to experience continuous learning even outside classroom hours.

Table 101: Summary of Tool

What does it enable?	Survey		Interview			Obs	How does it inhibit?	Survey		Interview			Obs
	T	S	T	S	MS			T	S	T	S	MS	
Anytime Anywhere							Restriction of anytime and anywhere						
- Extended classroom;		√	√	√	√	√	- Dependency on the Internet						
- Continuous learning;			√	√			subject to Internet and server		√	√	√	√	√
- Teaching and learning at			√				breakdown;						
own time and space;							- The absence of offline setting;			√	√		√
- Teaching preparation in					√	√	- Unaffordability to the Internet;			√	√		
advance of sessions;							- No/delayed feedback;			√	√		
							- Non-f2f (no physical presence)			√	√	√	√
										√	√		
							- Hardware/ Software issue						
Attractive and convenient							Inaccessibility of technical features						
technical features							- The absence of teleconferences and		√	√	√		√
- Combined multimedia		√	√	√	√	√	chatting platform for synchronous						
elements;							interaction;						
- Easy navigation;				√			- Limited collaboration features;			√			√
							- Unattractive interface/design;			√	√	√	
							- User-unfriendly;			√			
							- Limited video link embedded;			√			
							- Lack of reading materials on certain			√	√		
							subjects;						
							- The absence of activity notification				√		

What does it enable?	Survey		Interview			Obs	How does it inhibit?	Survey		Interview			Obs
							a. The absence of specific reply function on the forum b. Limited skills of MyGuru developers c. Easily outdated (programming) software				√ √ √		
<u>Efficiency for teaching and learning</u> - Communicating information - Recycling materials - Time/Money-saving - Catch up/ Recap previous lectures - Automatic feedback			√ √ √ √ √	√ √ √ √ √	√ √ √ √	√ √							

**Observation data were gathered from actual classroom observations and f2f interviews.*

In terms of communication, participation was asynchronous, which gave students extra time to read other contributions and construct their thoughts before writing their post (see: Bonk et al., 2006; Meloni, 2010; Skylar, 2009). Some students found this a benefit for a reflection on learning. This fundamental affordance of anytime, anywhere learning is recognised in the literature as the most important feature in an online setting as discussed in chapter 2 (see: Garrison & Kanuka 2004; Loureiro & Bettencourt 2014; Staker & Horn 2012).

As for the teachers, MyGuru had enabled them to have time for preparation for teaching in advance. This was backed up by MyGuru support staff view who believed MyGuru could help teachers' preparation. The support staff recognised this as an affordance for the teachers, particularly those who were more competent. This is consistent with studies, for example DiBiase (2005) and McKenney et al., (2010) show the use of a VLE saved teaching time as students could access the materials in advance and be better prepared. Storing resources in VLE also enabled greater efficiency as this material can be relocated in the future. In contrast a study by Hussein, Mustafa & Shaari (2018) found something different. Despite students being positive about their overall experiences of using a VLE, some claimed that it was time consuming to do activities out of classroom teaching hours. A contributing factor might have been technical difficulties associated with accessing a reliable internet connection. One teacher in my study raised some concerns too about the extra time and effort that accessing materials created, though this was not shared by other teachers. Indeed, the extension of learning was not always possible because there were some restrictions on the tool. All participants explained MyGuru relied heavily on the use of a good, well-established internet connection. To varying degrees, dependency on the Internet and server breakdown was an issue for all three groups of participants but was felt most acutely by students living on campus and relying mostly on the campus internet connection.

Poor internet connection was seen as an inevitable issue since the Internet infrastructure in Malaysia was among the slowest of 88 countries surveyed in a 'The State of LTE' report. The average speed of a 4G line in Malaysia in 2017 was 14.83 megabits per second (Mbps), placing the country among the bottom 20 countries on the list. To make the situation worse, the MyGuru server was unstable, and this made the system inaccessible especially as there was no offline version. The importance of reliable

internet connection is a consistent theme in the literature (see Fook Fei et al., 2012; Attaran et al., 2015; Siew et al., 2012) where they also found Internet connectivity had become a major obstacle in accessing teaching and learning in VLEs.

From another perspective, it was seen that not all students could afford internet subscriptions. Especially in rural areas, the Internet was unaffordable for some families. (see International Telecommunication Union, 2013). Access to technology is not equitable across sociodemographic categories and depends on resources available to households, communities and schools (Du & Havard, 2002).

The extension of teaching and learning was also compromised by the unwillingness of teachers to respond outside of lesson time and their capacity to do so. It is true that feedback mediated by technology is its most valuable educational feature (Gagné, 1974); in particular the Internet (and another web 2.0 tools) provides a powerful means to access feedback. However, studies showed that delayed or lack of student feedback could have a negative impact on students' learning (Joulani, 2013; Opitz et al., 2011; Rahmandad & Sterman, 2009).

Of course, technology enables automatic feedback, often in the form of right or wrong feedback within multiple choice questions. However, such feedback is limited. For example, Pridemore & Klein, (1995) suggested that the highest performance scores came from students who received elaborated feedback as compared to automatic correct answer feedback. Baker (2004) and Conaway et al., (2005) in their studies found that highly immediate feedback was associated with positive attitudinal changes that increased students' motivation and satisfaction.

Another restriction on anytime and anywhere access was the absence of physical presence. Some students, teachers and MyGuru staff perceived this as a limitation towards teaching and learning because they believed f2f interaction could be more interactive and could pick up non-verbal cues. This is echoed in the literature of Duke's (2001) study and Oxford Economics (2009), which argued that f2f interaction has some advantages regardless of how advanced our technology has become. For example, Bobek & Tversky (2016) and Chabani & Hommel (2014) reported on the importance of visual cues and immediate feedback had positive impacts on students learning.

However, some teachers expressed different views on the lack of f2f interaction. One teacher said he saw online instruction as an advantage for him as he could 'seal his emotions' in front of the students; for example, by covering up his frustration, he could behave more professionally with his students. The platform could help him to regulate his emotions. Studies have shown that emotional regulation is often associated with favourable education outcomes (Boekaerts, 2002; Boyle, 2016; Greenleaf, 2002; Gumora & Arsenio, 2002). In contrast, the literature has shown that positive emotions can exert a powerful motivating influence too (Linnenbrink & Pintrich, 2000). For instance, Fredrickson, (2001) found that students can benefit from an optimistic stance on learning.

Finally, hardware and software issues were other limitations on the use of MyGuru. This problem was visible among students and teachers but not within MyGuru support staff. This was most likely because students and teachers were the frequent end users of the system while the support staff were not.

Hardware and technical issues in online learning are not uncommon. These issues are among the barriers faced by teachers and students when using technology (Almohaissin, 2006; Al-Alwani, 2005; Becta, 2004b; Ghavifekr et al., 2006; Hara & Kling, 1999; Hobgood, 2007; Kanvaria, 2018; Schneckenberg, 2009; Sicilia, 2005; Toprakci, 2006). Technical malfunctions, inefficient ICT infrastructure and insufficient hardware were formidable hurdles that led to teachers to not use technology in Malaysia (Azizah et al., 2005; Mirzajani et al., 2016; Selvaraj, 2010) .

Tool: Attractive Technical Features

MyGuru was seen as a platform with attractive technical features such as a combination of multimedia elements and easy navigation.

With regard to the combination of multimedia elements, text, image, audio, video, and animation were the media used. Students and teachers all valued the use of media and found it engaging to have video in particular. The importance of multimedia is shown in studies, for example Cairncross & Mannion (2001), Nayef (2015) and Sloan et al., (2006). Through multimedia too, a space for synchronous or asynchronous communication was created (between students and teachers) thus offering increased opportunities for interaction and collaboration (e.g. Alim, 2007; Hampel, 2014; Doleck

& Lajoie, 2018) in their own (students and teachers) timeframe in more reflective ways (see also (Bonk et al., 2006; Skylar, 2009; Meloni, 2010; Garrison & Kanuka, 2004).

MyGuru was also seen as providing easy-to-follow navigation. Students, in particular, felt this helped them learn how to use MyGuru. The use of hypermedia was noted, and its significance in education is also discussed in the literature, e.g. Dillon & Gabbard (1998), Layman & Hall (1991), Lu et al., (1999).

However, there were also technical features that were not attractive. First, both students and teachers commented that there was no feature to support synchronous interaction. Teachers were also restricted because each course was assigned with only one instructor which made collaboration in design or sharing discussion forum much more difficult. These findings were paralleled with Fook Fei et al.,'s study (2012).

In addition, students and teachers found that, in terms of design, the interface of MyGuru was unattractive and user-unfriendly. Design of online learning platforms has a significant role as discussed in Strmecki et al.,. (2015) and Mohamed Azmi et al., (2012) and it is important to maintain a presence in online learning (Bawa, 2016).

Another difficulty mentioned by students and teachers was of embedding rather than linking to video resources within MyGuru. For example, to view a YouTube video, students had to click on a link and had to leave the system. The lack of reading materials on a certain subject had also reduced the efficiency of MyGuru platform in the dissemination of knowledge and information.

Moreover, the absence of activity notification and reply button on the forum had restricted students' and teachers' engagement, especially in the forum discussion. The limitations were recognised by MyGuru support staff who explained they had to use the existing LMS. There was limited time to develop the system, but they hoped to do so further in the future.

Tool: Efficiency for Teaching and Learning

Another affordance of MyGuru was its efficiency, as noted by all three groups of participants. Through MyGuru, lecture notes, announcements or assignments relevant to the course were communicated to students, and this helped in 'efficient' information sharing (see Hassandoust & Kazerouni, 2009; Yılmaz, 2012; Qwaider, 2011).

Another strength of MyGuru was that teachers could recycle materials. For example, they could upload teaching materials they had used in the past or any resources produced by other teachers, publishers, support staff or even students themselves. Again, this allowed for efficient use of time.

Additionally, MyGuru also afforded savings regarding time and money, especially for courses with a large number of students because, for example, they were not paying for the printing of assignments or papers. These kinds of cost savings are reported in other cases (see Bakia et al., 2012; Siew-Eng & Muuk, 2015: Singh, 2003).

Students and teachers found that the uploaded teaching materials helped students to catch up classes if they were absent. MyGuru also allowed automatic feedback of MCQ tests which they could repeat over and over again. In another studies, this feature is seen as an advantage (see, for example, Fei et al., (2012); Siew et al., (2012) & Ab Wahab et al., (2018)) because users could learn at their own time and pace, which is a key feature of most VLEs.

In summary, the key point is that most students, teachers and MyGuru support staff found promising affordances in the MyGuru tool. The affordances were centred primarily on the idea of extending learning by enabling access to material and communication anywhere anytime, a combination of attractive technical features, and efficiency for teaching and learning. The context was a consistent picture with the literature. On the other hand, use of the tool was compromised by the hardware and technical issues.

Subjects: Cognitive and behavioural domain

After knowing what MyGuru offered as a tool in teaching and learning, we now move on to the subject, the second element. There were three different groups of subjects in respect to those who used MyGuru: students; teachers; and developers. The characteristics of the subjects were explained in Chapter 4. To recap, there were 300 students (148 EP3 and 152 EP4 students), 16 language teachers, and 2 MyGuru support staff. The majority of the students had Band 2 (151) in MUET which is described as limited users whose language is largely inaccurate with many errors and hardly any attempt to link ideas. In both EP courses, female students greatly outnumbered male, in the ratio of 2.8:1.

In this section, I concentrate on the knowledge, skills, affect, and motivation which the subjects brought to the study. In respect to the cognitive and behavioural domains, students and teachers were found to have sufficient skills and knowledge to use MyGuru. This was evidenced by observing the data archives and indeed during the interview sessions some teachers demonstrated how they used the MyGuru platform. Not only that, interviewees were able to identify gaps in MyGuru plantform (e.g. no notifications, non-interactive discussion forums, incompatibility of video embedment) as well as develop further skills and support others in using MyGuru. Teaching in an online setting requires sufficient technological knowledge and skills for carrying out activities and learning new skills (Alvarez et al., 2009; Salmon, 2000; Preston, 2008). This was the case in my study (see Table 102).

Table 102: Summary of Subjects

Traits that are facilitated	Survey		Interview			Obs	Traits that are hindered	Survey		Interview			Obs
	T	S	T	S	MS			T	S	T	S	MS	
<u>Cognitive and behavioural domains</u>							<u>Cognitive and behavioural domains</u>						
- Sufficient skills to be a competent user of MyGuru; to develop and explain the use	√	√	√	√		√	- Limited knowledge of less used functions			√	√	√	√
							- Procrastinated when seeking help			√	√		
							- Lack of cooperation from users with regards to problem-solving					√	
- Able to attempt exercises as language reinforcement				√			- No feedback on assistance was given					√	
- Proactive in finding solutions to problems			√	√			- The absence of MyGuru training			√	√		
							- Lack of guidelines to conduct online forums			√			
- Sufficient knowledge of MyGuru purpose			√	√	√	√							
							- Unable to develop enough knowledge and skills due to workload			√	√		
<u>Affective domain</u>							<u>Affective domain</u>						
- Positive acceptance of using MyGuru			√	√		√	- Loss of enthusiasm when facing problems using MyGuru		√	√	√		
- Optimistic about the use of MyGuru			√	√		√	- Lack of initial confidence			√	√		
							- Unable to accept the use of MyGuru in teaching			√			
- Readiness to use MyGuru	√						- Scepticism that led to an unwillingness to teach and learn						

Traits that are facilitated	Survey		Interview			Obs	Traits that are hindered	Survey		Interview			Obs
							online - Unwillingness to collaborate			√	√ √		
<u>Motivation to use MyGuru</u> - To give and receive feedback from the - Compulsory to use MyGuru - Keep up with the 'current generation.' - Intrinsic motivation to develop programming			√ √ √	√ √	 √ √		<u>Motivation to learn English</u> - Intrinsic motivation to teach and learn English - Extrinsic motivation to rewards			√ √	√ √		

**Observation data were gathered from actual classroom observations and f2f interviews*

Another positive trait in skills development was that students and teachers were proactive when searching for solutions. As shown in the findings section, students said that when they had difficulties in accessing MyGuru, they sought out lecturers for solutions or alternatives. Teachers, in turn, would seek help and technical advice from the MyGuru support staff. These traits of proactivity are recognised in the literature as important for online learning too (see Grabe & Christopherson, 2008; McFarlin, 2008; Vatovec & Balser, 2009).

MyGuru support staff, of course, were particularly knowledgeable about MyGuru. Teachers were no longer a sole 'support system'; instead, their work was partially distributed to the support staff thus helping reduce some of the burdens in the technical area. Getting adequate support in terms of training, technical support has been seen as important in the success of online learning (Gibson et al., 2015; McPherson & Baptista Nunes, 2004).

However, there were also some shortcomings in the cognitive and behavioural domain. Firstly, students and teachers had limited knowledge of some less used features. For example, most teachers only used MCQ design for assessments although there were other types of available format. MyGuru support staff also said that they found it hard to catch up with technological advances. This was particularly the case as the programming for VLEs needed to be updated from time to time and new functionality was requested. The theme of technical support is not well-covered in the literature as most studies focus on teachers and students rather than the ICT support staff. Nonetheless this is an important dimension and by talking to ICT staff it was seen why they could not meet some of the teachers' requests, such as to produce a reply button in the discussion forum.

There was also a small number of students and teachers who tended to procrastinate when they needed help in solving a problem. Procrastinating behaviour has been found as an issue in online learning (see e.g. Cerezo et al., 2017; Karatas, 2015; Katz & Eilot, 2014; Steel & Klingsieck, 2016) though some see procrastination as a less serious threat than others (see, e.g. Corkin et al., 2011; Tice & Baumeister, 1997). This was also the case for students who claimed they also had a tendency to procrastinate, sometimes as a result of being overwhelmed by having a lot of work to complete in such a limited time.

MyGuru staff also added that, when a problem was resolved, they did not receive any feedback on the assistance they had given. Feedback is important for online students (e.g. Bonnel, 2008; Higley, 2016; Mondigo & Lao, 2017), but also important for support staff. When the quality of the online platform is improved, students' satisfaction levels and experience of learning might also be more positive (Graham & Scarborough, 2001; Alavi et al., 1995; Bryant et al., 2005; Eom et al., 2006).

Some teachers did not feel they had guidelines for conducting online monitoring. Not only that, some teachers also said that due to their workload, they could not spend time developing their skills in this area. This is a theme in the literature, e.g. Wetzel (1993) saw one reason why some teachers refused to integrate technology in their teaching as their feelings of incompetency or limited knowledge (see also Barbour & Adelstein, 2013, Easthope & Easthope, 2007). Of course, time constraints are seen subjectively, some teachers might have different ways of dealing with pressure and some were more willing than others to dedicate time to integrate My Guru in their teaching.

Support staff also had other commitments aside from developing MyGuru, such as CPD requirements that each staff member needed to fulfil. Thus, it was also difficult to meet some of the requests made by the MyGuru users.

Subjects: Affective Domain

The affective domain was a second domain. In this context, all three groups of participants, students, teachers and support staff, showed positive acceptance towards the use of MyGuru. Having positive acceptance is important as optimism and enthusiasm are key issues in the introduction as seen in the literature (see Baker, 2004; Hadfield, 1992; Lashari et al., 2013).

However, some students and teachers were demotivated when they faced problems using the application. The demotivation was seen in the students' survey and also interviews with both students and teachers. Some of the students and teachers said they felt intimidated to use MyGuru. MyGuru was seen more as a barrier than a platform that should have assisted learning.

Scepticism about MyGuru had led to their unwillingness to learn online and at some points made students reluctant to collaborate with others. Negative affect can become a

major hindrance towards learning (see Rowe, 2018; Moneta & Kekkonen-moneta, 2007; Sandanayake et al., 2011). As discussed in TAM, users will only be ready to use technology when they perceive the tool as useful and easy to use (Davies, 1989), which to some degree was the case in this study.

Subjects: Motivation

Each group of participants had mixed of motivations. Some students said that they wanted to use MyGuru in learning English because they could receive feedback from their language teachers; this was mostly identified as an externally driven motivation.

Teachers, too, had external motivations. They said that using MyGuru was one of the compulsory requirements as teachers. However, they also had intrinsic motivation. They wanted to keep up with the 'current generation' who were raised in the digital era. MyGuru support staff had a passion for programming which had driven them to join the university and develop MyGuru. Motivated students are more likely to actively engage with, enjoy and adopt a deep approach to learning and exhibit enhanced performance, persistence and creativity (Ryan and Deci, 2000) which was consistent in the current study.

Students and teachers both displayed intrinsic and extrinsic motivation in teaching and learning English. Some students expressed their love of learning English because they felt a sense of satisfaction with their progress, as did their teachers. Some teachers said they were motivated to teach English because it had been their passion ever since they were young. The similar type of motivation was found among the MyGuru support staff- about their love of developing programming. A study conducted by Md Nawi & Sidhu (2016) showed that students were intrinsically motivated to learn English and were engaged in learning. Not surprisingly this was more evident within high proficient students so that the study made a correlation between proficiency levels and students' motivation.

In summary, it can be seen that the subject groups were a mix of students, teachers and support staff. The participants were diverse in ethnicity, gender, age and role. They shared one thing in common; they had had wide exposure to technology irrespective of roles, ages, and genders. Most students and teachers showed they had the technology experience as well all motivation and attitudes to use MyGuru. Though this was not

universal, some students were more reluctant and skeptical about using MyGuru, as were some teachers. A similar attitude can be found in other blended learning studies for example Mohamad et al., (2015) showed that students were sceptical about the value of the online learning platform when they felt the uploaded materials were not relevant or accurate and this reduced students' motivation to keep using the tool.

Object: General Pragmatics Goals in teaching VS Technology Goals

Concerning the object, I identified general goals that teachers, in particular, had towards their teaching. Table 103 shows from the teachers' perspective, their goals in teaching the EP courses were pragmatic. Teachers said they needed to cover the entirety of the prescribed curriculum. In accomplishing this goal, teachers had to have realistic expectations due to the diversity of students in terms of needs and proficiency levels in a class.

In order to be realistic, some teachers said they had to adapt their teaching according to what they were expected to cover and mix and match with students' abilities. The object was compromised by having a large group of students with diverse abilities; it was impossible to teach each one according to their attributes. It was enough of a challenge for teachers to seek activities which were relevant to their contexts (see UNESCO, 2004). In addition, teachers also needed to be creative when it came to delivering the teaching materials online. A similar finding was seen in Wah et al.,'s (2014) study which found in-service teachers felt they had to be imaginative when integrating a f2f and a non-f2f setting.

Table 103: Summary of Objects

Goals	Survey		Interview			Obs
	T	S	T	S	MS	
<u>General pragmatics goals in teaching</u>						
- Work according to the curriculum			√			
- Have realistic expectations			√			
- Adapt to curriculum applicability and students' differences			√			
- Build the confidence to communicate in the real world			√	√		
- Get students through the EP course to advance to the next level			√	√		
<u>Technology Goals</u>						
- To ensure the system can be used by everyone					√	
- Provide support by troubleshooting					√	
- To provide training to all lecturers and students					√	

MyGuru support staff also had a pragmatic orientation in their work which was to ensure the system could be used by everyone, to provide support regarding troubleshooting and to provide training to the end users, students and lecturers. Being clear about their objects was important as both students and teachers needed easy access to different kinds of support from the MyGuru support staff. Automatic grading for instance, was possible in MyGuru, however not many teachers knew how to set this up and would not do so without the proactive support of MyGuru support staff.

In regard to learning outcomes, students and teachers both shared a similar object, i.e. developing communicative competence in English. Students said they wanted to improve their communication skills due to having limited opportunities to speak in the target language outside the EP course. Teachers also said, from their experiences, most of the undergraduate students could not convey meaning in English. Hence, communicative competence was also one of their additional goals although it was not clearly stated in the curriculum.

Students and teachers realised the importance of being fluent and accurate in English as this could give them an advantage when entering the real world after their study. Learning English is not only about understanding one's culture but "the primary function of a language is for interacting and communicating" (Richards & Rodgers 1986, p.7). Thus, developing students' communicative competence in English would enable students to express their ideas and opinions and help them to understand the diversity of values, beliefs, world views, ways of thinking and patterns of life (Zhang & Zhang, 2015). Achieving communicative competence also means students would be able to meet the changing demands across their lifespan (Light 1997, p.67).

Along with communicative competence, students wanted to improve their mastery of English to widen their chances of being employed after graduation, as well as following the requirement set by the university making the EP course compulsory for every student there. These findings were similar to Simons et al., (2004) that students had their external reasons for their studies which ranged between proximal goals such as course credits and graduations to distal goals like financial and career-related goals.

Both teachers and students shared similar goal in the EP course. Teachers wanted students to pass the course while students wanted to pass and advance to the next level. By addressing students' instrumental goals, teachers could better respond to students'

motivation for learning. The literature showed that one of the most important factors in students' success is motivation (Fryer et al., 2016).

In terms of covering the curriculum, providing some communicative practice and using ICT, students and teachers had similar goals. The goal of the support staff was slightly different as their goal was to ensure the system was up and running. This was in line with their job specifications as set by the university too.

Rules: Instructional

Following subject comes rules. Rules here refer to the explicit and implicit regulations that governed students' and teachers' activity with MyGuru. I focused on what the rules were and the consequences of following the rules.

As an overview, I grouped all the rules under instructional strategies. Table 104 shows these rules governed the design of the syllabus for teaching and learning in general, in the classroom as well as in MyGuru.

Students and teachers were in agreement that the teacher had to work to the syllabus. The syllabus was mediated by the course textbook. The use of the course textbooks had benefits such as providing consistency and sequence between levels; enabling students to know what they could expect from the course; and helping teachers to save time from developing the teaching materials themselves.

There were two different types of textbooks used by teachers; some used the old and some the new. Teachers felt from experience of using the new textbook (which was slowly being introduced throughout the semester), that it was more balanced in terms of the four skills as compared to the previous version.

Teachers also worked from a course guide ('instructional plan') which they uploaded to MyGuru. The course guide presented the teacher's name and contact information as well as a planned schedule for the semester in terms of topics covered, events, and deadlines of assignments. This explicit guideline kept both students and teachers fixed on the planned course throughout the semester.

Teachers were expected to point out the learning objectives at the beginning of the course. This was to let students know what they were expected to do during the course. There were also some requirements for the use of MyGuru.

Table 104: Summary of Rules

What were the rules?	Survey		Interview			Obs	Consequences of following the rules?	Survey		Interview			Obs
	T	S	T	S	MS			T	S	T	S	MS	
Instructional Rules							Instructional Rules						
- Teachers must cover the syllabus		√	√				- Subject content lacked depth			√			
- The 'new syllabus' covered the four language skills equally			√			√	- Content not geared to Malaysian students			√			
- Course guide covered what and how to teach	√		√	√		√	- Too much assessment			√			
- The syllabus was grammatically focused	√	√	√	√			- Too much to cover			√			
- Teachers were expected to point out expectation at the beginning of the course				√	√	√	- Activities lacked interactivity			√	√		
- Using MyGuru was a requirement for teachers and students		√	√	√			- Inflexible			√	√		
- Teachers were expected to achieve blended mode status.			√				- Guidelines about the use of BL in T&L were unclear (Teachers left in doubt as to expectation)			√	√		
- Failure to complete EP course will require retaking the course.			√	√			- Students and teachers used MyGuru (see outcomes)			√	√	√	
							- Some courses were unsuitable for the students – some found it as too easy			√	√		
							- Some had quite instrumental attitudes (see earlier)			√	√		

What were the rules?	Survey		Interview			Obs	Consequences of following the	Survey		Interview			Obs
- Only the first level can be missed on the basis of prior learning			√	√									

**Observation data were gathered from actual classroom observations and f2f interviews*

The use of MyGuru was compulsory. Hence, to achieve the blended mode status, teachers were required to upload a certain number of teaching materials and to conduct different types of activities on MyGuru. Students were also required to use MyGuru for their learning. The purpose of adopting MyGuru was with the stated aim that students were 'getting the most out of the experience' in a good quality online learning environment. In the literature, most early studies did not state whether the use of BL, or a particular VLE, was deemed as compulsory or otherwise for teachers and students, even if over time a high level of expectation had arisen over its use. One reason for the drive to use VLEs was that many studies agreed that the use of online learning could help improve student retention and satisfaction though making a direct link with learning outcomes was not straightforward.

Another rule was the requirement for students to pass all four EP courses in order to graduate. Students were allowed to miss EP 1 prior to learning. If they failed, they had to retake it. The reason for this rule was that students were expected to be well versed not only in their mother tongue but also in the English language. Such requirements are widespread in educational systems where English is not a first language but is a medium of instruction at least some of the time.

Rules: Consequences

There were some consequences of these rules. In regard to the textbook, most students and teachers had some criticisms. According to them, the syllabuses (old and new) emphasised grammar rather than communicative work. Some teachers felt that a lot of the grammar content was superficial. This was in line with Gómez-Rodríguez (2010) who saw many English textbooks as too mechanical (grammar-oriented) rather than communicative practice. Students were not asked to use the language to communicate, which in return had made them feel frustrated. This is in line with much of the literature on language acquisition which shows that drill and practice does not help students in improving their communication skill and fails to provide access to authentic setting in which language use is unpredictable.

However, in my study, the complaint was that the materials were not culturally relevant, and this set another barrier. Similar finding can be found in Md Nawi & Sidhu (2016) where students seemed to struggle with the native speakers' accents and pace. This was

particularly true for low intermediate proficiency level of students who had more limited experiences of language in use.

Teachers also stated that there was too much assessment in the course. Through assessment, teachers should be able to identify students' strengths and weaknesses and at the same time evaluate the teaching programs. However, in my study, teachers questioned the number of assessments they had to do. The excessive assessments added extra workload without, in their eyes, enhancing student learning (see also Mohamad et al., 2015; Sherrington, 2018).

Teachers said that the syllabus was a too content heavy while from the students' perspective, the syllabus also lacked interactivity. More content did not mean more learning (Monahan, 2015). Students could not recall what they had learned. Instead, teachers would have preferred students to be able to apply 'less knowledge well rather than much knowledge badly'. Not only that, but the syllabus was also inflexible. Teachers felt they had to follow the whole syllabus as all the units would be tested at the end of the course. This created inflexibility and teaching that covered the content too superficially.

There was also an issue with the guidelines on the use of BL. Teachers, in particular, said that they were asked to use BL in their teaching but, even if some assistance was provided, it was insufficient and for some help was also out of date, e.g. MyGuru self-access manual. These were deemed as not helping the teachers to solve the problems they faced during teaching. However, it could be seen that the guidelines meant students and teachers used MyGuru (see Outcomes).

Some students found some of the EP courses were unsuitable for them. Students expected to move from EP1 to EP4 and expected each course to be progressively more difficult. However, some of them found it very hard to differentiate between the four courses. This is almost similar to study by Fook Fei et al., (2012) and Siew et al., (2012) where their participants found the difficulty level was not challenging enough especially felt by more highly proficient students.

Last but not least, students were found to have instrumental attitudes towards learning the EP course (see earlier). The instrumentalism had affected the way they used MyGuru and teachers had to tailor their teaching goals accordingly. Last but not least,

students were found to have instrumental attitudes towards learning the EP course (see earlier). The instrumentalism had affected the way they used MyGuru and teachers had to tailor their teaching goals accordingly. This overlaps with a strong theme of Blin's (2005) earlier research in which she found that the language curriculum promoted a strategic orientation to study.

In brief, the rules of following the syllabus were mediated by textbooks and teachers needed to cover the syllabus on time. There was an improvement in terms of focus in the language skills in the new textbook but, regarding content, grammar was still the focus. There were also other requirements students, teachers and MyGuru support staff needed to meet about teaching and learning in the EP course using MyGuru. This had been earlier noted by Chung (2006) in her study which found that most Malaysian textbooks retained the structural method of teaching grammar thus defeated the purpose in promoting communicative language teaching.

Table 105: Summary of Division of Labour

Intra-roles	Survey		Interview			Obs	Inter-roles	Survey		Interview			Obs
	T	S	T	S	MS			T	S	T	S	MS	
- To participate in activities		√	√			√	- To collaborate with	√	√		√	√	√
- To study for the course,			√	√		√	peers/colleagues						
sit for the exam, complete							- To distribute task for		√		√		√
the assignment and attend							assignments/teaching tasks						
classes							- To give and receive	√	√	√	√	√	√
- To teach a structured class			√	√		√	feedback/assistance/instruction						
- To develop own teaching			√			√							
materials													
- To integrate classroom	√			√		√							
and online activities													
- To facilitate and monitor	√				√	√							
MyGuru activities													
- To become coordinator				√		√							
role for an individual													
- To attend CPD	√		√		√								
- To manage time	√		√		√								
- To improve the system					√								
- To keep the system going					√								
on					√								
- To provide/to attend			√	√									
training													

**Observation data were gathered from actual classroom observations and f2f interviews*

Division of labour

The fifth element, a division of labour presented two different types of roles: intra and inter. Intra roles were about one's responsibilities while inter roles were about the roles between peers and colleagues (see Table 105).

The participants had played their respective roles. One of the main roles of the students was to study for the course, sit the exam and fulfil the requirements as a student should. Students further elaborated that they used MyGuru mostly as a platform to practice English language learning through tests and quizzes. Students could attempt the exercises as many times as they wanted. This is in line with a study by Detaramani et al., (1999) that highlights technology such as computers, in particular, was perceived as the ideal tool to carry out online practices. Moreover, the use of technology in language learning too has shown a positive impact on language learning (see Abdul Rahman, 2018; Boster & Staff, 2004; Rajaretnam, 2004; Zhao, 2005).

Teachers also had their roles in the EP course, and one was to teach according to the syllabus in a structured class. Teachers then further explained that the flow of their lesson was a normally similar, i.e. introductory session to the topic followed by lectures on the subject content; this was also seen in the observation. After giving the input, teachers then gave enrichment activities, usually via two methods: learning module (book) and MyGuru. The same pattern of teaching can be observed in most Malaysian classrooms which have tended to be teacher-centred in spite of some attempts at curriculum reform. This has clearly had consequences for student attitudes towards learning.

In some instances, when teacher delivering the activities, teachers would provide explicit instruction and systematic feedback and corrections together with monitoring students during the process. The behaviour is consistent with a study by Rosenshine (1987). The pattern of the structure showed the teachers' attempts to manage the instructional process in a way which would optimise the amount of learning that could take place in the available time (Richards, 1985).

In executing the roles, developing teaching materials, integrating the online and offline activities and facilitating and coordinating the students were among other tasks they had to fulfil. This was done by ensuring that students knew what exercises they could do

and how. Mostly, teachers demonstrated during the f2f session. Indirectly, this showed students how they could apply and evaluate the information that is available online (see Handelsman et al., 2007).

MyGuru staff also shared responsibilities with the teachers regarding attending CPD and managing time. They had to ensure the MyGuru system was up and running, providing training and at the same time responding to requests from the users and sometimes fixing the problems through troubleshooting. In summary, each group of participants had different roles individually and between themselves. These roles varied according to their objects.

Community

Community is the sixth element in CHAT and refers to the social groups with in which the subject identifies while participating in the activity. The community discussion is a short section because it is threaded in all elements (see Table 106). However, as a summary, I identified three different social groups: students, teachers, and MyGuru support staff. Each group in the community tended to share similar perspectives enabling them to put forward a holistic view of the community.

The community agreed that the use of MyGuru was as a tool in the EP course and had major advantages in the form of anytime and anywhere access. The community felt that MyGuru allowed the extension of teaching and learning outside the classroom hours and the combination of multimedia elements had made the process of learning more interesting. MyGuru was seen as an efficient tool for teaching and learning. Information was disseminated efficiently. They all shared the view that students could learn more by themselves and receive instant feedback.

However, the community was also aware that the use of MyGuru required the use of the Internet. The dependency on the Internet could be a major problem as there was no offline application to access MyGuru. Moreover, the text-based interaction had reduced opportunities for visual clues. Not only that, problems in design and lack of reading materials made MyGuru less attractive.

Table 106: Summary of Community

What did the communities have in common?
• All communities (students, teachers and MyGuru support staff) agreed that: • MyGuru allowed anytime and anywhere access: MyGuru as a tool to extend teaching and learning, and MyGuru combined multimedia elements • MyGuru was effective for teaching and learning regarding communicating information; recycling materials; time/money-saving; recap previous lectures; and automatic feedback • There were restrictions on using MyGuru: relied heavily on the Internet connection, no offline application, non-f2f interaction, had software and hardware issue; absence of synchronous communication; had unattractive interface/design; lack of reading materials on certain subjects.
• MyGuru had impacted on cognitive and behavioural domains in terms of sufficient skills and knowledge to be competent users and developers of MyGuru; users became proactive when seeking for a solution towards the use of MyGuru • MyGuru had impacted on the affective domain: positive acceptance; optimistic users; and motivated to use MyGuru • There were limitations such as limited knowledge of less used functions on MyGuru; some users procrastinated when seeking for help, claimed there was no training on MyGuru; difficult to improve MyGuru due to workload; loss of enthusiasm when had a problem using MyGuru; lack of initial confidence and scepticism to use MyGuru
• Wanted to build the communicative confidence to prepare for the real world and to pass through the EP courses
• All communities had to abide by the explicit and implicit rules which were: teachers had to cover the syllabus, new syllabus covered the rest four language skills equally; had course guide to help inform students of the course structure; grammatical in focus; teachers pointed out expectations at the beginning of the course; was required to use MyGuru; failure to complete would cause to retake the course, and only one level could be missed. • In following the rules, there were similar consequences felt by students and teachers which they found; lacked interactivity of syllabus; inflexible course; unclear rules on the use of MyGuru in the BL implementation; there was MyGuru use due to the enforcement of the

What did the communities have in common?
rules.
• Communities were aware of the different roles they had. For example: students- to study, sit for exam, do assignments, to take part in the activities (individual vs group work); teachers- to teach the course, monitor and to give and receive feedback on the activities; MyGuru support staff – to provide support by troubleshooting, improve system from time to time

The community also shared a technical ability to use the software and a motivation to do so. Most members of the community were competent users of MyGuru. When MyGuru failed, some knew what to do to seek assistance. Teachers for instance, would seek their friends whom they thought were good at computer literacy. Whilst students would turn to their peers or teachers when they needed help. Overall there was positive acceptance, optimism and motivation towards the use of MyGuru.

However, there were shared tensions with respect to MyGuru. The community had limited knowledge of less used functions on MyGuru. There was a tendency to procrastinate when having technical difficulties. All members of the community faced time constraints regarding study or producing materials.

As regards language, members of the community wanted to build communicative confidence and competence. However, all had to abide by the explicit and implicit rules of the course such as covering the syllabus until the end of the semester, following the course guidelines and having teachers to explain the expectation of the course. Another shared criticism of the course was the focus on grammar. However, one thing they had in common, the usage of MyGuru was quite extensive by both communities due to the enforcement.

The community was also aware of the different roles they held. Almost all members knew their main purpose in taking the EP course, what they had to do in delivering the content and what they had to do in keeping the system in working order for all. In conclusion there were similarities that the community shared and at the same time, there were also differences that each member acknowledged.

Outcomes

Outcomes concern the consequences of using MyGuru in the activity system. Overall, the outcomes were divided into two sub-themes, the encouraging and discouraging outcomes from using BL, specifically MyGuru. For the encouraging factors, I grouped the findings into students and teachers. For this part, I developed another three main themes which I found significant and reliable to be counted as the main backbones of the outcomes of the activity system: teaching and learning; activities; and affective. For the discouraging factors, I presented the findings by groups: students and teachers, and it covered all different sub-themes as discussed in the previous sections.

Table 107: Summary of Outcomes

What were the encouraging outcomes from using BL?	Survey		Interview			Obs	What were the discouraging outcomes from using BL?	Survey		Interview			Obs
	T	S	T	S	MS			T	S	T	S	MS	
Students and teachers							**Students**						
Teaching and learning											√		
- Improved language skills: reading, writing and oral fluency		√	√	√			**- Time constraint**				√		
											√		
							- The propensity to copy and paste		√		√		
- Helped achieve learning goals	√	√	√	√			- Some skills difficult to address						
							- Felt teachers did not reply to queries						
- The use of MyGuru and f2f instruction enhanced students' interaction	√	√	√				**Teachers**						
							- BL was more demanding to teach			√			
- Better preparation for classroom teaching		√	√	√		√	- Faced teaching difficulties			√			
							- Felt BL as a burden			√			
							- Challenged/not challenged to rethink teaching			√			
Activities													
- A balance between MyGuru and classroom activities	√	√					- Lack of technology skills			√		√	
							- Time constraint			√		√	
							- Difficult to cater to different levels			√			√
- There was a use of MyGuru	√	√				√	- No communication between teachers online			√			
							No guidelines to measure online performance			√			

What were the	Survey		Interview			Obs	What were the discouraging	Survey		Interview			Obs
Affective							Uncertainty of performance			√			
- Boosted self-confidence	√	√	√	√									
- Reduced anxiety/stress		√	√										
- More open in sharing opinions and interesting		√	√	√									
- Preferred and satisfied with BL especially for practicing language learning	√	√	√	√									

**Observation data were gathered from actual classroom observations and f2f interviews*

These findings contained data compression. Thus, some of the findings as presented before might not be visible due to the density.

As shown in Table 107, in relation to teaching and learning, students and teachers saw that MyGuru helped students improve their language learning skills which included reading, writing and oral fluency. Students and teachers also said that, because of MyGuru, they could better achieve their learning goals by the end of the course. Increased interaction, better preparation and enhanced interaction were also among the positive consequences for teaching and learning. Students and teachers agreed that there was a balance between MyGuru and classroom activities. Teachers felt that they managed to execute the activities successfully both in MyGuru and classroom, thus helping students to keep focused on learning. Students and teachers also displayed that they used MyGuru for practising the exercises and discussing on the online forum discussion. However, this was limited to the commonly used functions.

Another significant outcome was in the affective domain. Teachers said they found students to become more confident, and MyGuru had subtly reduced their anxiety to be more open in sharing. The use of MyGuru had made the course more interesting.

Regarding discouraging outcomes, some students, in particular, saw the use of MyGuru as time consuming. Also discouraging was that students tended to copy and paste their work and claim it as theirs. Not only that, students noticed they had difficulties in focusing on certain language learning skills when learning online. The absence of replies in discussion forums had further driven students away from using MyGuru.

Teachers had some explanation for the discouraging outcomes. For instance, some said that using a BL approach was demanding as they lacked skills to do so. This was seen more as a burden when MyGuru was unstable. The guidance on how to use MyGuru was sometimes poor. For example, there was no clear guideline on how to conduct the BL approach especially when it comes to measuring the online performance. Teachers were left unsure whether they were using the system 'properly'.

Teaching a large number of students, with different proficiency levels, on an unfamiliar online platform was also challenging. With time constraints as one of the biggest issues,

using MyGuru made teaching harder especially when some teachers had to rethink their work in order to fit the students' needs.

From the perspective of the MyGuru staff, they shared similar challenge to the teachers. Although the support staff had done their part in ensuring the MyGuru system was up and running, they also had difficulties with technical issues, e.g. server failure, which made it difficult for them to keep the system in order. Keeping up with the technology was another problem for the support staff, and they had to keep maintaining support for the whole university. Time constraint also was another problem because as university staff, they also had CPD to attend.

In brief, there were three main outcomes from the use of MyGuru in the EP courses: improvement in teaching and learning, advantages of the activities and positive impacts on the affective domains. There were also discouraging outcomes identified as discussed previously.

Summary

These findings triangulated the analytical findings in Chapter 4, 5 and 6. From the triangulation, we can see that CHAT help us understand each element tool, subject, object, rules, division of labour, community and outcomes by merging the similarities and separating the differences that they shared.

How does CHAT help us understand the way that BL is used in a higher education institution? : Modelling of the activity systems.

In Chapter 4, 5 and 6, data were presented according to each group of participants whereas, in the first part of Chapter 7, a compression and triangulation of data were performed by integrating all groups of participants. In the second part of chapter 7, my intention is to derive the compressed findings based on the CHAT framework by modelling the activity systems.

CHAT is usually used to understand the contradictions or tensions that exist within a system, both in language teaching (Blin & Munro, 2008; Wah et al., 2014; Wold, 2011) and more generally (see Engeström 2009; Larkin 2010; Karasavvidis 2009; Duffy & Kirkley 2004). Here, I will propose three activity systems and the way stability is created within the system. These three systems are suggested by the differentiated outcomes that I had seen in the study. First, there is a phenomenon of foundational activity. Here, the outcome of the system is focused on regular use and the giving of information. Second, there is a phenomenon of sporadic activity in which the system is rarely used. Third, there is another phenomenon known as the expansive model in which MyGuru is more frequently used, and activity goes beyond presenting the information and is directed towards collaboration.

These three models, explained below, represent phenomena associated with the use of BL. The models are abstractions from the data and not an attempt to represent individual courses. These models indicate three of the possible kinds of outcomes that might be associated with the introduction of BL. It is important to understand how and why these different models are enacted. Thus, the models consider the relationship between each element of the activity system though the emphasis is given to the tool, MyGuru, and how the students and teachers viewed the tool. Critical too is the object in their activity and how this is shaped by the rules provided by the institution and the roles in the community.

All six components in an activity system are related to each other, and these are usually represented in double-headed arrows. In my models, my diagrams emphasise the relationship between the main elements using bold double-headed arrows. The

relationship between all elements is assumed rather than presented as the diagram would become too complex to understand. In other words, my focus is on the key relationship between subject, tool and object (with attention given to *rules, community and division of labour*) which could be clearly followed by readers.

Foundational Activity

Figure 20 illustrates the phenomenon of **foundational activity**. The key idea of the **outcome** here is regular use of the tool by both students and teachers with both claiming that this use has led to a positive impact on the language learning skills. In this model, students and teachers both use the tool in advance as a preparation for teaching and learning (though in different ways) so that students receive information about a lesson and teachers prepare this information in advance. Subjects believe the use of the tool helps them to achieve their goals at the end of the course.

Regarding the **tool**, students and teachers view the tool as having both interactive and multimedia affordances which make lessons more productive and give them greater flexibility. The navigation is seen to work to allow them to receive and present information smoothly. The tool is seen as saving time and money. Subjects use this tool to upload documents in different formats, not limited to MS Words and PDF alone.

Other views of the tool are possible. However, in this model the **subjects**, students and teachers view the tool through the lens of their motivation to pass the course or have the students pass the course, which drives them to become more prepared and optimistic about learning with technology. They feel ready to integrate MyGuru in their teaching/learning. Having sufficient skills and knowledge helps the subjects become open to the use of the tool. They can see other things in the tool — for example, a tool for communicating and learner-centred activity. However, their perspective is shaped by their instrumental attitudes to meet with the curriculum and schemes of work and to advance to the next level of EP.

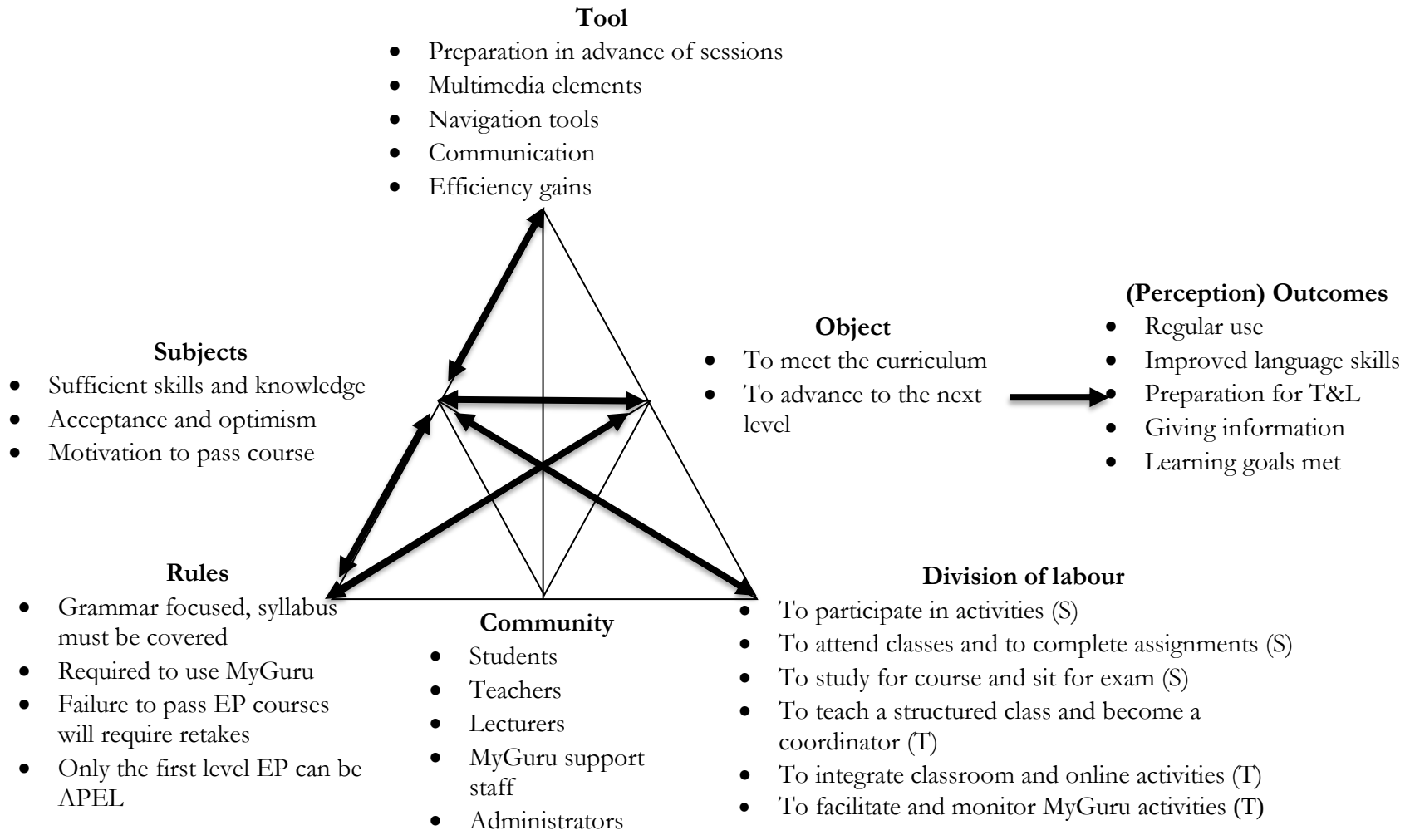

Figure 22: The Phenomenon of Foundational Activity

The foundational model of use works within a **community** in which each member is aware of their roles in ensuring the system operates accordingly. Under the **division of labour**, students understand their roles as participating in the activities, completing the assignments and sitting the exams. Teachers understand their roles as integrating MyGuru and teaching a structured course following a scheme of work. In this model, students and teachers both are playing the roles which work towards the same objects: meeting the syllabus and passing the course.

The foundational model is typical in my study and is well represented in the literature. Many researchers have found that the use of BL and other VLEs is to provide information (Budka and Mader, 2006) help administer the course however it does seem that this tool can be used regularly if not frequently and they carry perceived benefits (see Gedera & Williams, 2015; Wold, 2011; Karasavvidis, 2010; Wah et al., 2014). BL helps save time and cost and be better prepared in advance are also akin to other studies such as McKenney et al., (2010), DiBiase (2005) and (Graham et al., 2003). This foundational model fits better to a web-enhanced learning model as proposed by Smith and Kurthen (2007). Despite that, the use of BL is successful if continously accepted and used in the long term (Al-Busaidi & Al-Shihi 2012).This kind of activity system, however, is not limited to the BL context alone, but this pattern is visible in other VLE contexts as generally discussed in Chapter 2.

Sporadic Activity

Figure 21 illustrates the phenomenon of **sporadic activity**. Here, **outcomes** are very constrained. There is some sporadic use of MyGuru, but the impact on language learning is negligible. In particular, writing and speaking skills are not addressed. There is little feedback from the teachers or between students. Teachers see MyGuru as a burden, and there is uncertainty about its value or how to use it.

The **tool** offers the same affordances in all three models. However, in this sporadic model, it is the limitation of the tool which subjects, i.e. they see the use of MyGuru as too dependent on the Internet and subject to server breakdown. All subjects see MyGuru as unattractive and unfriendly and are also aware of the absence of an offline setting. Importantly, MyGuru is seen as a text-based tool and lacking the intimacy of physical interaction.

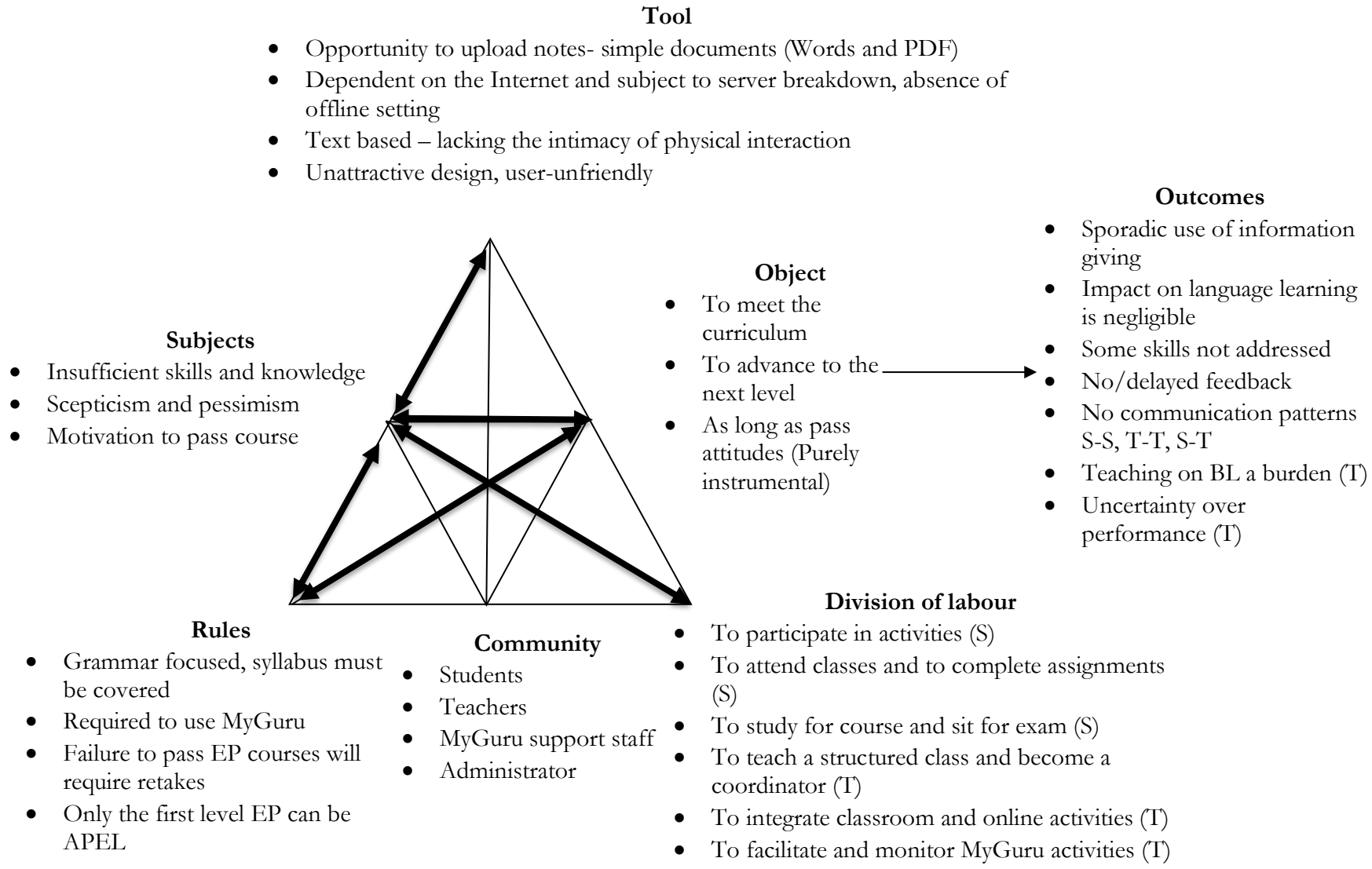

Figure 23: The Phenomenon of Sporadic Activity

Why do the **subjects** see the tool in such a limited way? Teachers, in particular, have insufficient skills to use the tool and knowledge about the tool to see its potential. They may be pessimistic and sceptical towards technology, and on the same vein, some students fail to appreciate the tool as it lacks the user friendliness and interactivity of social media they are used to. They show negative attitudes towards the tool and use procrastination and non-compliance as a way of avoiding its use.

As with the foundational model, subjects are aware that their **object** is to meet curriculum goals and, in the case of students, advance to the next level. Both students and teachers have instrumental attitudes towards learning; they focus on passing the course or having students pass the course rather than deep engagement in language learning.

As with the foundational model, the **rules** of activity are to cover the syllabus and meet the assessment requirements. In pursuit of passing the course, subjects have to complete the assignments as one of the course regulations. Since participation in MyGuru is not awarded marks, students in particular feel there is no rule making them use MyGuru regularly.

As regards **division of labour**, students need to attend classes, complete assignments and sit exams. Students have to find time to engage in MyGuru activity, however they often are unable to do so due to their extra-curricular activities on campus. Teachers are required to teach the course in a structured way according to the scheme of work and the same time are required to make some use of MyGuru, but this has to compete with other demands. Teachers also have to fulfil the CPD requirement. In their roles as teachers, they have too much content to cover in classes and too much assessment to complete.

As with the foundational model, the sporadic model is well-represented in the literature. More general studies point to barriers in education including both extrinsic and intrinsic ones (see Ertmer 1999; Keengwe et al., 2008). Extrinsic barriers include technical problems, e.g. equipment shortage, lack of technical support, unreliability of tools and user unfriendliness and often the lack of internet connectivity as seen in BL contexts including in Malaysia (Fook Fei et al., 2012; Siew et al., 2012; Wai & Seng, 2013).

Intrinsic barriers cover teachers' attitudinal orientation including worries about teaching with technology and unwillingness to accept change. Students' and teachers' perspectives on the usefulness of BL tools are influenced by computer anxiety, technical knowledge and unwillingness to innovate, e.g. Al-Busaidi & Al-Shihi, (2012). Lack of knowledge and skills is another important limitation in BL as in Alebaikan, (2010); Kenney & Newcombe (2010), Khan et al., (2012).

Anxiety and scepticism about impact are often seen as more significant in low use of ICT than lack of the skills. Studies show that technology has a higher chance of being adopted when users have positive perceptions towards the technology itself (Czaja et al., 2012; Heinz et al., 2013; Mitzner et al., 2010). This is also consistent with TAM that sees too use as an outcome of whether the user sees the tool as useful and convenient to use (David, 1989). Time constraints are important too but need to be taken as subjective. The struggle to manage time is real and affects the ability of the teachers to carry out their work. No teacher has enough time, but it is how the teacher manages and prioritises their time that matters. For example, time appears as an issue in implementing BL approach as in Alebaikan (2010); Gedik et al., (2013); Heaney & Walker (2012); Kenney & Newcombe (2010).

In the literature students' attitudes are dealt with less consistently. Some students feel that BL does not provide value to the learning experience as in So & Brush's (2008) study. Subjects with limited expectations often feel unable to face technical problems or challenges when expected to use the tool.

Core to the sporadic model are the instrumental attitudes of the subjects. Studies suggest that if subjects' attitudes are instrumental, incentives should be provided, for example administrators reward teachers with recognition, advancement or financial rewards while teachers reward students by giving marks for participation (see Almekhlafi & Almeqdadi 2010; Hoffman 1996; Vegas & Umansky 2005). If students have instrumental attitudes, then it is essential that assessment should be measuring appropriate things to promote deep learning (see Chen & Yao, 2016).

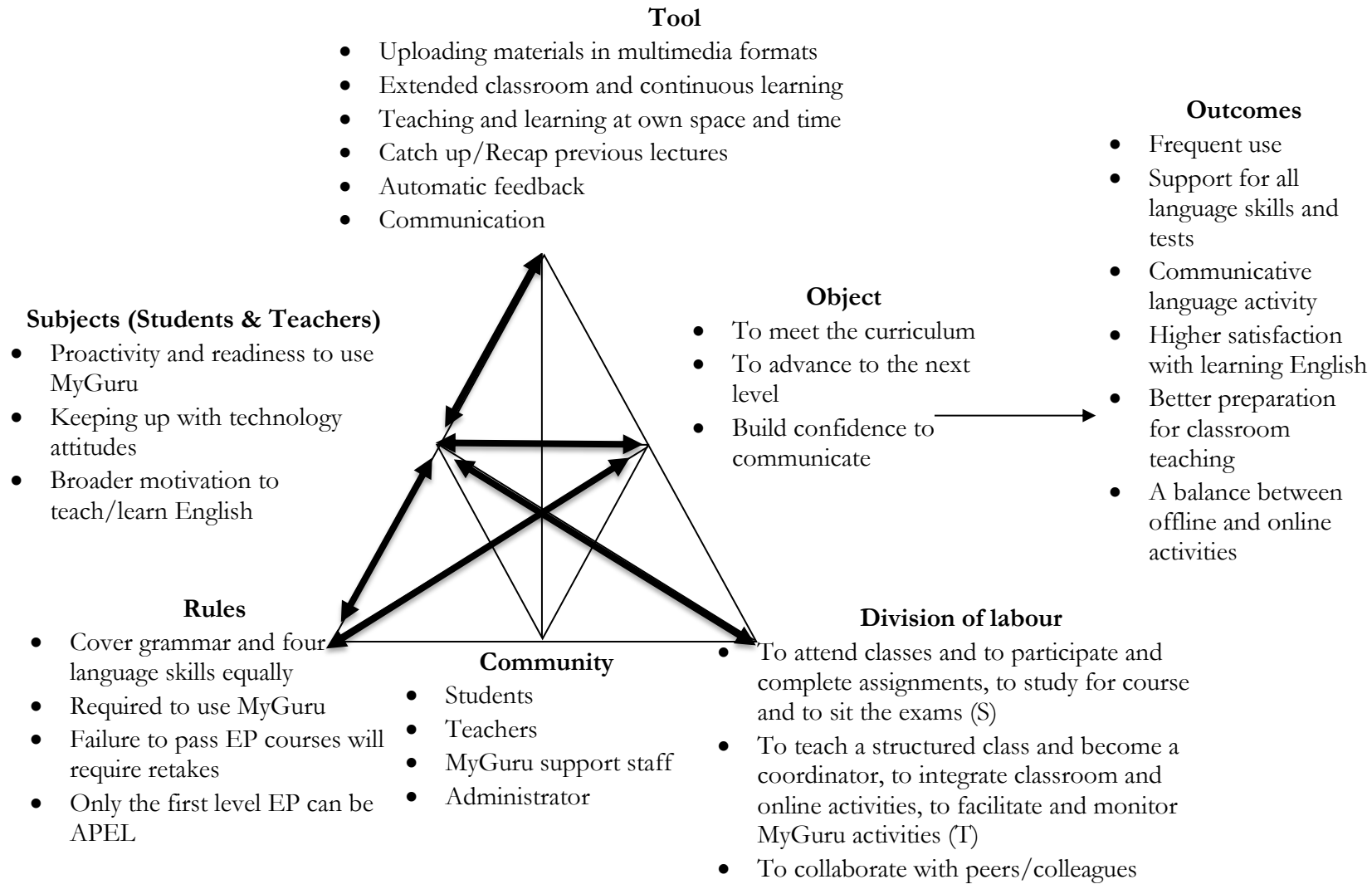

Figure 24: The Phenomenon of Expansive Activity

Expansive Activity

Figure 22 presents the final phenomenon, **expansive activity**. The key idea regarding **outcomes** is that MyGuru is used frequently. This helps students and teachers to cover the four skills and gives them opportunities to engage in the communicative activity. This results in greater satisfaction in learning English compared to the foundational and sporadic models. MyGuru is used to prepare for teaching and learning as with the foundational model. However, MyGuru is not confined to information giving, but it is used as a tool for collaboration. MyGuru enables extension of the classroom by allowing for activities that would not be possible to do in class. This is an idea of integration which is not based on 50-50 balance between offline and online activities, but it is based on what works better in different environments.

The most significant feature of the expansive model is that MyGuru is seen as a **tool** that has affordances which go beyond giving and presenting information. Communication and collaboration are recognised as possible through the use of forums and sub-groups. Salmon (2000) proposed a five-step model of e-learning which began with access and socialisation, moved towards information exchange and went on to knowledge creation. This shift of focus was seen as deliverable through the active role of 'host' or e-moderators. The model however plays down the curriculum constraints on change (the types of constraints seen in my study) and like much ICT offers a kind of determinism or inevitability about the whole process. In contrast, in my view, the use of My Guru might well stabilise around information exchange no matter that this is a restricted view of what BL offers..

A next step in integrating blended learning is to move from information exchange towards knowledge construction, either via scaffolding or self-discovery, in order to develop higher level learning. Not only that, MyGuru enables students to catch up with missing lectures or to recap previous lessons as preparation for tests and exams. Automatic feedback provides traditional practice for students.

All of these views of MyGuru are shaped by **subjects** who are eager to use the technology and capable of picking up the skills they need. Subjects are often proactive and ready to embrace the integration of MyGuru in their teaching and learning. They are willing to take part in giving and receiving feedback and hence, pick up affordances of communication within the tool. Another reason why they see these opportunities is

that they have a broader and deeper motivation in language learning which is associated with developing communicative competence, and not simply passing the exams.

Like subjects in all three models, their **objects** are to meet the curriculum and advance to the next level. However, unlike the previous model, subjects are additionally concerned with building confidence to communicate in the real world.

In achieving their objects, subjects follow the **rules** set by the university which are to cover grammar and the four language skills. Due to a broader motivation to cover communicative competence, subjects can tailor their role to fit better with the pedagogy. Their roles in the **division of labour** in this model are similar to the other two models. However, they are concerned to adapt their roles to foster communicative activities**.**

In essence, the core idea in the expansive model is that it offers a higher degree of flexible learning with communicative and collaborative opportunities. Subjects' perceptions of language learning lead them to see MyGuru as a tool that provides opportunities for discussion (the tool's use is not confined to information giving). However, this is still an instructional model of teaching. The teacher is still in control of the opportunities. It is not a radical learner-centred model.

The literature shows BL has the potential to facilitate interactive and collaborative learning (Chen et al., 2010; Harasim, 2000) and there are expectations that the current generation of students is able to do this (Hakkarainen et al., 2013; Lee et al., 2008). However, it does not matter whether the subjects are labelled as digital natives or immigrants, or even grouped according to their social class and ethnic background. What matters the most is what they want to learn or whether they want to speak in English. These attitudes will shape how they view the tool (Davies, 1989) and their actions as students. It is essential to understand the subjects' goal so that we get a better picture of how the goal orientation can affect the learning and teaching strategies that eventually lead to the desired learning outcomes, either better or worse. Among the three models, the expansive model has an opportunity to support active engagement, collaboration and social presence. These are often associated with contributors to successful learning outcomes (Garner & Rouse, 2016; Parker et al., 2013), and this model is seen as promoting such attributes. However, unless the curriculum is retailored

to value these skills, it is unlikely that expansive learning will have an impact on tested learning outcomes.

In summary, this section shows that CHAT is useful in offering a holistic picture of an activity system. The BL activity can be analysed using each element and, from there, a derivation of three different models are finally constructed, thus throw light on understanding how the system could be analysed.

Concluding remarks

We saw earlier that CHAT is a theoretical framework that offers a holistic view of human interaction and technology integration. CHAT analyses people's motives and goals in a wider context. The reciprocal process enacted between subjects and objects lies at the core of the CHAT model, and the relationship between these two is transformed into activity within a surrounding system.

CHAT is used to identify and explain contradictions raised within the activity system so that a solution can be explored. Contradictions, instability and internal tensions are considered because they are seen as an opportunity to trigger innovation and change as well as a source of development (Barab et al., 2002; Engeström 1987; Engeström 2001; Blin & Munro 2008; Helle 2000). Zigzag arrows often portray the tensions that arise within the activity.

The benefit of using CHAT is that it gives a view of a system as a whole. CHAT provides a way of understanding how systems work by breaking down the elements in manageable ways. This is often done through the use of the triangle diagram used within this thesis. CHAT provides a forensic analysis of activity as we are asked to uncover the influence of each element.

Another strength of CHAT is that it puts emphasis on the tool. There are many studies about technology integration that follow a social constructivist perspective. Often, they look at the general issue of ICT as though ICT was a single thing and was uncomplicated to describe. CHAT encouraged me to look at MyGuru in detail: what did it do, what strengths and weaknesses did it have, and how did other people view it? With CHAT, researchers are pushed to see what the tool does in the activity system.

However, there have been criticisms of CHAT, in particular that it offers 'over-socialisation' of subjects. In other words, subjects are over simplified because they are seen in terms of their roles while their inner agency, drives, motivation and beliefs are downplayed. Although the social context of each subject might be similar within the community, the positioning of each one of them is distinctive, and will always be unique to their individual history. The uniqueness shapes the agency of the individual (Valsiner & van der Veer 2000).

As a consequence, the activity system maybe biased towards stability even when allowing for contradictions. In part, this is perhaps a consequence of the diagrammatic representation. The triangle represents a strong structure and is a metaphor for a system being stable and difficult to shift. The system appears over-determined and it is hard to understand why it will ever change.

When it comes to my study, on the plus side, I could see the benefits of applying CHAT. For instance, CHAT helped me order my analysis of MyGuru in a way that I would not have done otherwise. The undoubted strength of CHAT is that it offers a means to take in the whole system but also to break the system down in a manageable and detailed way. A lot of literature on ICT has been about the subjects' age, gender, learning and teaching styles, and motivation, but lacking an understanding of the system as a whole. Without this wider perspective, the danger is I would have been seeing the system with a focus on a single element, most likely subjects, students, teachers or MyGuru support staff, in isolation. Instead, I was led to see how subjects behaved in the context of the system. CHAT gave me opportunity to step back from a micro analysis towards a holistic one. This is what CHAT offered. Focusing only on one element is like seeing an engine or fuel system without understanding that this is part of a car. For many purposes, we do not need to know how a system works and, to use the analogy of a car, we can go from one place to another perfectly well. But if one wants to go into detail about how a car works, a forensic understanding is needed, and this is what CHAT offered me in respect to MyGuru.

In using CHAT, I did not follow a prescriptive model. Instead I let my imagination lead the way. I let the data that I obtained from the students, the teachers and the MyGuru support staff inform me as to the way I should analyse and present the findings. By including the teachers, students and MyGuru support staff within a system, I see myself as having been imaginative, and that is the strength of my study. Not only do I manage to identify different types of perceptions, motivation and objectives, my imaginative work has enabled me to produce three different models rather than in the more common use of CHAT, only one. That is the twist in my study.

In thinking about imaginative responses to CHAT, I realised there was much more I could have done about community. For me, community was a problem throughout this research. I looked at how community was discussed in other papers, and saw an overlap

between the elements of subject, community, rules and division of labour. In my study, I managed to make community an element but did not differentiate it clearly enough from other elements. When it came to modelling, I put community aside. This was because most of what I wanted to say about community was covered in division of labour, rules and subject. Looking back, I wish in thinking about community, I had considered wider issues social and cultural issues and interaction between subjects. For example, I could have looked at the university as a flat or hierarchical structured institution and explored the consequences for practice. The community describes the formal division of labour, but it needs to include cultural assumptions. Another aspect of the community is interaction between people. In looking at why and how the system might change, community may become a really important issue. For example, the community of teachers is not fixed, and it changes as new teachers arrive and older teachers retire. New thinking comes into the community. A community that interacts regularly could provide opportunities for sharing experiences, ideas as well as giving support to one and another. Even in my case, I will come back into the community. People like me who have studied abroad will have an influence. We will probably lead to some changes in the future.

If given the opportunity to use CHAT again, I would definitely think twice due to the overwhelming and over-complicated nature of the analysis and the difficulty in getting a workable distinction between each element. This struggle was more acute when I had to differentiate between the subject, community, division of labour and rules within the system. In many cases, my data could have fallen into any of these three headings and this often left me frustrated as I kept swapping from one to another. The idea of a holistic approach offers a further challenge. The undoubted strength of CHAT is it describes the whole system. The possible weakness here is that, unless the researcher has unlimited time and resources, they cannot go into detail with each element. One of the key problems here is dealing with subjects. As seen earlier, subjects can be reduced to roles of the system. Now that I have gained an understanding of the system as a whole, I might decide to go deeper into one element. For example, to understand more about the way in which students used technology and whether they really are the digital natives as Prensky (2001) and others suggested they are. It does not mean I dismiss the CHAT framework; I value the framework for influencing the way I should be thinking of understanding a system. I appreciate the value of CHAT. I have learnt to think about the use of technology in ways I really could have not imagined beforehand.

Chapter 8: Conclusions and Recommendations

Introduction

Chapter 8 sums up what is covered in the thesis. This chapter is divided into four sections:

- what was covered in the study?
- recommendations of the study
- values of the study to academia
- limitations of the study

What was covered in the study?

In chapter 1, I provided an introduction to the different conceptualisations of BL and its application in the language learning context. A brief narrative on the history of English learning in Malaysia was presented, including its relation to the BL approach. Following this, CHAT, as the theoretical background of this study, was described. The rest of this chapter talked about the research questions that I aimed to address and my own personal reflection of doing this study.

In the literature in chapter 2, I found that technology was first used in education systems many decades ago and a fairly romantic concept of technology has been built up over time. BL is not a new concept. BL was found to offer promising opportunities in teaching and learning, but some obstacles had hindered the implementation. Ubiquitous learning with some elements of student control over time, place, path or pace were noted though these views mainly come from technology enthusiasts. From another perspective, realists have warned educators of the factors which enthusiasts often overlook including leadership, vision, shared ethos, training and ICT infrastructure.

A third group, pessimists, had a rather distinctive view about technology. They would argue that technology was an unnecessary disruption to teaching and learning. Being skeptical about technology, and a failure to see what technology can offer, often clouds their judgement.

There are other ways of theorizing the uptake of technology, but CHAT was identified as a particularly interesting one because it provided a forensic analysis in understanding an activity system. This became the main focus for the investigation.

Chapter 3 concerned methodology. I perceived myself as a realist. Thus, in investigating the integration of BL in English Proficiency courses in a Malaysian public university through the lens of Cultural-historical Activity Theory, 3 methods of data collection were employed: 2 surveys to 300 EP3 and EP4 students and 16 language teachers, 24 interviews, and observation of 2 EP courses. The study was a single case study with an explanatory purpose. The focus was MyGuru as the main tool to support BL in English Proficiency courses. Mixed methods became my research design, and data triangulation was used in analysing the findings. Using three different methods, across three different groups of participants, was indeed my biggest challenge due the extent of the data and the complexity of the analysis.

Chapter 4, 5 and 6 presented the data from each method and from the point of view of different stakeholders. From the survey, I learned that students and teachers had different backgrounds with Malay as the major ethnicity. Most students and teachers were female. Most students had more than 11 years of English learning experience, yet many still struggled to achieve an intermediate proficiency level based on the MUET and self-rated results. Findings showed that there was active engagement with technology for different reasons including academic and non-academic purposes.

Findings from Questionnaire 2 showed that all of the participants had a fairly positive view on the use of MyGuru. The tool offered affordances for interactional resources, but it had some limitations in terms of connectivity. All participants were aware that there were some rules that they needed to adhere to. Participants received reasonably satisfactory support and feedback from their use of MyGuru. Both students and teachers felt overall satisfaction from the integration of the BL approach.

Data from the observation (f2f and online archives) indicated that teaching tended to be directed instructional but with attempts at interactivity and student-led activity.

Interview data largely confirmed and extended survey findings. The interview data explained subjects' motivation and personal attitudinal characteristics (**subject**); what they saw was offered in MyGuru (**tool**), the roles within/between subjects (**division of**

labour), and the differences and similarities in students', teachers', and MyGuru support staff's objectives (**object**) including instrumental attitudes, the curriculum and syllabus (**rules**) designed by the institution and the community roles in providing support and giving instructions (**community**). Positive and negative impacts on teaching and learning were captured via the **outcomes**.

In the discussion in Chapter 7, I addressed the main research questions and sub-questions explicitly: i) What can we understand about students, teachers and support staff from the CHAT lens in the BL context of English Proficiency courses? and ii) What does the CHAT lens offer?

Research Question:
For the research question "How does the CHAT help us understand the way that BL is used in education institution? This involves addressing specific questions framed around the seven elements of the CHAT model:

i. Tool: What does the tool enable regarding teaching and learning?
MyGuru offered affordances in terms of efficiency of resources and extending the classroom for continuous teaching and learning. MyGuru came with interactive multimedia elements to initiate interactive and fun learning. MyGuru also allowed asynchronous and non-f2f communication but this required good internet connectivity.

ii. Subject: What are the personal and attitudinal characteristics of the subjects?
Subjects in this study were students, teachers and MyGuru support staff. All subjects were found to share some similar characteristics in terms of behaviour, affect, motivation, and orientation towards teaching and learning. For example, from the behavioural perspective, all subjects had substantiated sufficient knowledge and skills to use MyGuru and positive attitudes towards its use and some was due to external drives they had. From the affective perspective, there were inhibiting and encouraging emotions displayed by the subjects. But, in brief, the majority had quite a positive, accepting attitude towards MyGuru. In terms of motivation, there were different types towards the use of MyGuru, e.g. extrinsic vs intrinsic, whilst in terms of orientation to teaching and learning, some subjects were found to be proactive in finding solutions, while some were easily demotivated when having troubles. Some preferred to procrastinate.

iii. Object: What do subjects want to achieve in their roles?

There was some diversity across different groups of subjects, but most subjects had instrumental goals in the EP courses. There were, however, some groups of subjects who wanted to build their communicative competency. MyGuru support staff aimed to get MyGuru working and used so that all subjects could use the system smoothly.

iv. Rules: What expectations surround teaching and learning and the use of the tool?

There were some expectations laid before the subjects, teachers and students in order to use MyGuru. For example, students and teachers had to follow the curriculum and syllabus as designated in the instructional plan. The use of MyGuru and the need to take EP courses were among the rules that they needed to adhere to.

v. *Division of labour: What are the roles and relationships of the subjects?*

Subjects assumed different roles in the activity system. Two types of roles were identified: inter (between) and intra (within) subjects. Students' roles for instance, revolved around their need to attend the classes, to complete the assignments, and to sit the tests and exams. Teachers and MyGuru support staff looked more fulfilling teaching and developing the system requirements. Teachers were expected to teach, and students were expected to learn.

vi. Community: How does the community help the subjects in achieving their objects?

Community roles were threaded in each element but, overall, students and teachers found their learning community supportive. The key findings showed that all subjects shared similar perspectives of MyGuru. They saw MyGuru as a tool to assist teaching and learning but at the same time acknowledged the limitations it had. In helping the subjects to achieve their objects, the community provided support in terms of training, feedback, and assistance, either technical or non-technical.

vii. Outcomes: What are the different kinds of the outcomes in the activity system?

There were different kinds of outcomes for stakeholders. Students, for instance, claimed there were positive impacts on their language learning, such as in terms of spoken text. Some said they became more confident speaking in English. The use of MyGuru had also had a cognitive impact so that students had to think before posting in the online forum. Both language and IT skills were developed due to the use of MyGuru. There

were some discouraging outcomes, mainly involving time constraints. The was a tendency to copy and paste; with some skills were not addressed; and the absence of replies in discussion forums was also a problem. Some teachers lacked the skills involved developing a BL approach, thus found themselves stumbling. MyGuru support staff also had their own problems when dealing with the MyGuru system and the users' demands. Time constraint was visible across the three sets of stakeholders.

In addressing "How does the CHAT help us understand the way that BL is used in education institution?" three different models of BL activity were described: foundational, sporadic and expansive frameworks. These models were derived from the CHAT lens. The foundational model showed a regular use of MyGuru particularly for giving information. This was a result of the instrumental attitudes but also the willingness to try and enhance teaching and learning within an activity system which was restraining. The sporadic model described an irregular use of MyGuru with an opportunity to upload notes and documents in typical formats (Word and pdf). Sporadic use was mostly apparent when the internet connectivity and server were disrupted. This was influenced by the instrumental attitudes of students and teachers and framed by roles and expectations. Expansive model showed that students and teachers trying to break through the constraints of the activity system to achieve deeper learning via communicative and collaborative practice. The expansive model promoted opportunities to support active engagement, collaboration and social presence. From all three models, the foundational was seen as the most typical pattern in my study and best-fitted the literature.

Recommendations of the Study

Throughout this thesis, I have been making recommendations, and here I want to summarise these recommendations and direct them to four stakeholders: students; teachers; leaders and academics. My suggestion for the students is to engage themselves with MyGuru or any other VLE. Studies have shown that there are positive impacts on students' learning and opportunities to extend and enhance learning. However, it is also important that the students realise that technology is not a solution and they should develop a deeper interest in language learning, and not restrict themselves to the instrumental view. Language is a really important competency skill which students and

teachers need to see the importance of. Students can consider MyGuru or other VLE platforms, not only as a tool for revising a lesson or attempting a test. It should go beyond that. For instance, they can try to get a wider view of the language and try to take an interest in materials for broadening learning. Online resources should not be limited to VLE only or to the ones that teachers and the institution offer. Students should step out of their comfort zone, expand their focus and explore outside the institution. There is a world of materials that have been helpfully signposted online, such as those by the British Council or newspapers, news reports and YouTube videos, as well as engaging materials developed for students of English. It is just a matter of taking time to inculcate passion and not simply use the technology just because you have to.

In helping develop students' interest and learning, teachers have an important role to play. Teachers can become the ones who ignite the students' passion for language learning. They can present attractive activities to unleash student interest. For example, teaching seems to be dominated by the textbooks as one of the main teaching resources in the ESL classrooms. Rather than depending solely on textbooks, teachers can become more creative in making use of the authentic materials that are available online, as a supplementary tool in their teaching. I would recommend teachers use the VLEs, be it MyGuru or others, to not only upload their teaching materials (Ms Word, PPT, PDF and such), but also upload other materials related to the lessons in many other interesting formats or links. Teachers can also take part in the online forums, as one way to stimulate more of students' active engagement. Since teachers are required to use the BL approach, they can use this as a trigger to redevelop their teaching and learning. Data from my observation showed that the teachers did not really make use of MyGuru in the classes.

Leaders have an important role too. They could consider revamping the curriculum to make it less instrumental and to provide more assessment of communicative activity. They could also introduce an assessment scheme that is directed towards collaboration. They also need to consider training. There is a workshop provided for all students and teachers but somehow this was seen as insufficient. The one-size-fits-all training did not seem to work for all teachers. Some teachers need some supplementary support, particularly in the classroom, to enable them to extend the use of MyGuru or any other technology required for teaching and learning. For example, it would be better if

teachers were given demonstrations of managing real debates and access real examples of online assessments in their training or maybe making it open to other staff so that they can see what their colleagues doing. Having invested money, time and energy in MyGuru, the institution should ensure teachers have the right support to make it work.

Last but not least, I hope my study will inform the debate about technology in academia. My study does not support the romantic view of ICT although I am a technology enthusiast myself. I would like the academic field to be more realistic because carrying out this research has taught me the value of being so. There are some risks related to being realistic as it might lead to instrumentalism and the use of technology on grounds of efficiency and managerialism. One can be realistic and enthusiastic by drawing attention to the ways in which technology can change the pedagogy. What academics need to do is to focus less on being spokespeople for romantic notions and instead tell and show the community the way to get there. Besides being pragmatic, I would like the academia to engage more with the theory. Speaking from my personal view, getting engaged with the theory myself helped me widen my horizons. I was able to expand my view through the use of CHAT. There are many other ways of theorising technology, but CHAT has helped me to step back from only focusing on either the teacher or the student. It drew my attention to a more holistic view which was helpful, though it may be complex and overwhelming at times. The overarching idea was the need to stop looking from one point of view, instead forensically analysing every aspect from different angles.

Value of the Study to Academia

This thesis has value for several areas of research. Firstly, investigation of BL activity from the CHAT lens helps better inform other researchers who have similar research interests. As seen in Chapter 2, research on this area is still underdeveloped at least in respect to blended learning, English language proficiency and CHAT. The main value of my study is a refreshed perspective on BL through a CHAT lens. Blended learning has been researched by many academics in different contexts and subject matters. CHAT provides a forensic analysis in understanding BL activity, specifically the complexities of human activity in BL settings both in theory and practice. With CHAT, we can know more about the mediation of a tool in learning. The study informs the community about how CHAT can throw light on stability as well as contradictions or

tensions existing within an activity system. I have presented three models to the community which other researchers can use, explore and adapt in their own work. This approach to CHAT may have relevance to other types of activity systems too. My models are not the last word, but they give the community something to think about and shown how they can improvise according to their own context.

Secondly, my study also contributed in terms of the research design. I developed several instruments for the data collection. For instance, I developed four types of questionnaires, two of which (students' and teachers' Questionnaire 2) had been validated through the pilot and main study. Although there were some items that have internal consistency reading of Cronbach's alpha coefficient value below α=0.7, other researchers could modify the weak items accordingly. I have given an initial start to academics and they can modify the instruments based on their needs. The same also implies to the semi-structured interview questions and the observation schedule. These will help other researchers to develop their own instruments. In terms of findings, the study showed a strong combination of qualitative and quantitative inquiry for data analysis. Through the triangulation of data, a high level of trustworthiness is offered. Many previous studies have focused on one paradigm, either quantitative or qualitative alone, which is not sufficient for a holistic understanding of the BL activity. This thesis has given useful insight into how a mixed methods study can be conducted.

Thirdly, as an enthusiast of the technology myself, I was conflicted; I wanted to see only the positive perspective on the use of MyGuru but in this study, I learnt to be balanced and to give a realistic perspective of its use. Although I have personally experienced the benefits of using MyGuru, I have to acknowledge the limitations in using the tool. I believe the academic community can gain from my study a realistic perspective, rather than seeing technology as a panacea.

Limitations of the Study

The limitation of this study was the specific population employed for this research, which was EP3 and EP4 students at the university. This was a convenience sample which raised ethical and other issues. However, Orb et al., (2000) felt that the advantage of conducting a study in a familiar context is that it could result in a better understanding of the situation. This I felt applied in my case but given more time I

would have liked to carry out a multiple case study, for example a study in a university that I am not familiar with.

Another limitation of my study is that I could only reach a small number of teacher participants for my pilot study. The reason for this was the limited total number of language teachers that I had reserved for the main study. At the language centre, the total number of English language teachers was only 16. Therefore, I had to search for other language teachers who had similar teaching experiences as the participants of my main study in respect to the reliability and validity of the instruments. In addition to that, the small sample of respondents (students, teachers and MyGuru support staff) which was drawn from a single institution may cause the findings to be inappropriate for generalisation beyond the specific population.

In terms of the online observation, I could only manage to have online archive observation. This issue could also be due to some limitations of the platform that allowed only one instructor per group. Each EP course was assigned by the university an appointed course coordinator and some language teachers for different groups under each EP course. Since the courses were not mine, I did not have direct involvement in the MyGuru EP courses. Therefore, I had to ask the involved language teachers to capture the interfaces (print screen) of their MyGuru activities and also to demonstrate the screens in between our interview sessions. Despite not getting a direct observation of the online sessions, I still managed to gather the required information that was relevant to my research questions. Through this method too had given me ample examples for the description of the online experiences.

There is a limitation in case study. Case studies are not generalisable, but they are relatable. In order to assist that relatability, I have produced models that other researchers can use. But these are not generalisable models, these are ways of drawing on my work which others can use in new situations. Those who are in principle against case study, will see this as limited.

Overall, I have thoroughly enjoyed conducting this study. I myself have learnt a lot about research and believed I have acquired the necessary skills to become an independent researcher. I hope that my study will be a benefit to my community and a wider academic community.

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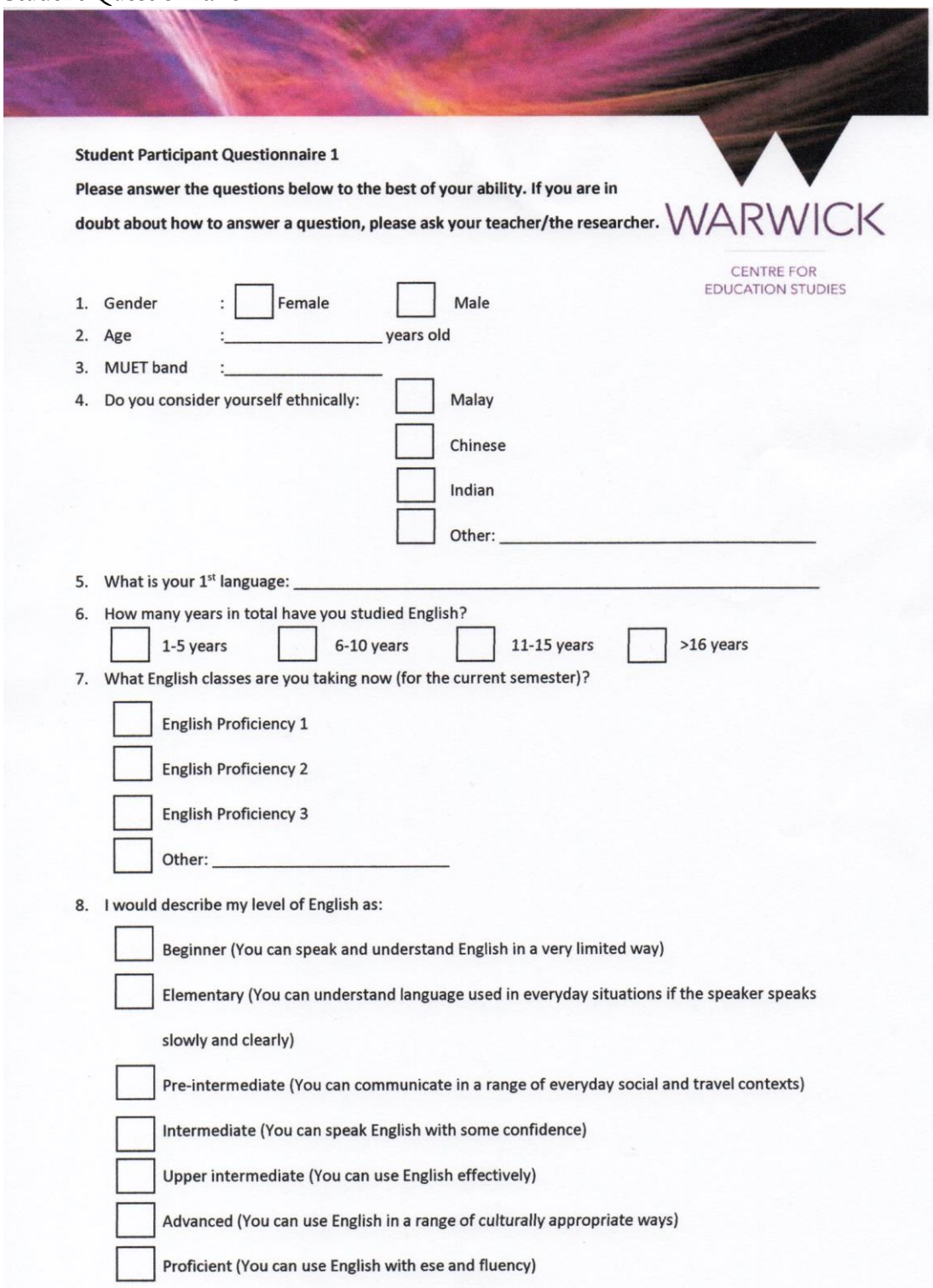
Appendix A: Questionnaires

Student Questionnaire 1



Student Participant Questionnaire 1

Please answer the questions below to the best of your ability. If you are in doubt about how to answer a question, please ask your teacher/the researcher.

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1. Gender : ☐ Female ☐ Male
2. Age :_____ years old
3. MUET band :_____
4. Do you consider yourself ethnically:
   - ☐ Malay
   - ☐ Chinese
   - ☐ Indian
   - ☐ Other: _____
5. What is your 1st language: _____
6. How many years in total have you studied English?
   ☐ 1-5 years ☐ 6-10 years ☐ 11-15 years ☐ >16 years
7. What English classes are you taking now (for the current semester)?
   - ☐ English Proficiency 1
   - ☐ English Proficiency 2
   - ☐ English Proficiency 3
   - ☐ Other: _____
8. I would describe my level of English as:
   - ☐ Beginner (You can speak and understand English in a very limited way)
   - ☐ Elementary (You can understand language used in everyday situations if the speaker speaks slowly and clearly)
   - ☐ Pre-intermediate (You can communicate in a range of everyday social and travel contexts)
   - ☐ Intermediate (You can speak English with some confidence)
   - ☐ Upper intermediate (You can use English effectively)
   - ☐ Advanced (You can use English in a range of culturally appropriate ways)
   - ☐ Proficient (You can use English with ese and fluency)

9. How many hours per week do you spend using English outside class to:

	Activity	Number of hours per week		
i)	Do homework	☐ 1-5 hours	☐ 6-10 hours	☐ >11 hours
ii)	Prepare for quizzes and exams	☐ 1-5 hours	☐ 6-10 hours	☐ >11 hours
iii)	Ready for fun	☐ 1-5 hours	☐ 6-10 hours	☐ >11 hours
iv)	Play computer games	☐ 1-5 hours	☐ 6-10 hours	☐ >11 hours
v)	Listen to music	☐ 1-5 hours	☐ 6-10 hours	☐ >11 hours
vi)	Watch TV, videos and movies	☐ 1-5 hours	☐ 6-10 hours	☐ >11 hours
vii)	Talk to friends	☐ 1-5 hours	☐ 6-10 hours	☐ >11 hours
viii)	Browse websites	☐ 1-5 hours	☐ 6-10 hours	☐ >11 hours
ix)	Shop online	☐ 1-5 hours	☐ 6-10 hours	☐ >11 hours
x)	Listen to language tapes	☐ 1-5 hours	☐ 6-10 hours	☐ >11 hours
xi)	Online text chatting	☐ 1-5 hours	☐ 6-10 hours	☐ >11 hours
xii)	Online voice chatting	☐ 1-5 hours	☐ 6-10 hours	☐ >11 hours
xiii)	Write emails	☐ 1-5 hours	☐ 6-10 hours	☐ >11 hours

10. Have you ever studied or lived in another English-speaking country (UK, Canada, Australia, etc.)?

☐ Yes ☐ No

If yes, how long you were there? _____

11. What did you do there? (e.g. travel, study, etc.)?

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12. Would you like to be interviewed? ☐ Yes ☐ No

----------**THANK YOU**----------

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Student Questionnaire 2

WARWICK

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Part A: Please answer the questions below to the best of your ability. If you are in doubt about how to answer a question, please ask the researcher.

Statement	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
1. I have sufficient skills to use MyGuru	1	2	3	4	5
2. The university provided MyGuru training for students	1	2	3	4	5
3. The online activities in MyGuru are interactive	1	2	3	4	5
4. I am able to improve my English skills through the use of MyGuru and face-to-face instructions	1	2	3	4	5
5. Learning using MyGuru and face-to-face instructions is easy	1	2	3	4	5
6. I collaborated with my peers in MyGuru activities	1	2	3	4	5
7. The integration of MyGuru and face-to-face instructions are useful	1	2	3	4	5
8. The use of MyGuru with classroom instructions are interesting	1	2	3	4	5
9. The integration of MyGuru and face-to-face instructions enhances the interaction between teachers and students	1	2	3	4	5
10. Tasks given in MyGuru and face-to-face instructions are clear	1	2	3	4	5
11. There was a good balance between MyGuru and classroom activities	1	2	3	4	5

12. The online and classroom activities worked well together	1	2	3	4	5
Statement	**Strongly Disagree**	**Somewhat Disagree**	**Neither Agree nor Disagree**	**Somewhat Agree**	**Strongly Agree**
13. I got the technical support I needed during this course	1	2	3	4	5
14. The combination of MyGuru and classroom lecture gives me enough time to do my tasks	1	2	3	4	5
15. I would like my other English courses to be taught with the combination of MyGuru and face-to-face instructions	1	2	3	4	5
16. I learn more with the integration of MyGuru and face-to-face instructions	1	2	3	4	5
17. Slow internet connectivity is a problem to access MyGuru	1	2	3	4	5
18. My teacher did not reply my queries	1	2	3	4	5
19. MyGuru materials were not well organised	1	2	3	4	5
20. The teacher was not on available for the activities in MyGuru	1	2	3	4	5
21. The combination of MyGuru and face-to-face instruction is frustrating to use.	1	2	3	4	5
22. I participated actively in classroom discussion	1	2	3	4	5
23. I did not participate actively in MyGuru discussion	1	2	3	4	5
24. I did equal tasks distributions for the group assignments	1	2	3	4	5
25. There were varieties of activities in MyGuru	1	2	3	4	5
26. I received feedback from my peers in MyGuru	1	2	3	4	5

27. I received feedback for my classroom assignments	1	2	3	4	5
28. The teacher pointed out the learning objectives clearly at the beginning of the class	1	2	3	4	5
Statement	**Strongly Disagree**	**Somewhat Disagree**	**Neither Agree nor Disagree**	**Somewhat Agree**	**Strongly Agree**
29. The teacher uploaded sufficient learning materials in MyGuru	1	2	3	4	5
30. The teacher took part during the online activities	1	2	3	4	5
31. I had easy access to MyGuru	1	2	3	4	5
32. I attended MyGuru training provided by the university	1	2	3	4	5
33. I received feedback from teacher of my activities in MyGuru	1	2	3	4	5
34. I achieved my learning goals from this course	1	2	3	4	5
35. The use of MyGuru allows me to use other different computer programs too.	1	2	3	4	5
36. The combination of MyGuru and face-to-face instructions helps me to master the learning content	1	2	3	4	5
37. I was aware of the rules in using MyGuru	1	2	3	4	5
38. Getting technical support was easy	1	2	3	4	5
39. I felt a sense of satisfaction and achievement about the integration of MyGuru and face-to-face learning environment	1	2	3	4	5
40. The structure of the MyGuru and face-to-face environment keeps me focused on what is to be learnt	1	2	3	4	5

Teacher Questionnaire 1

Teacher Participant Questionnaire 1

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Part A: Demographic Information

Name : _____

Gender : M / F

Age : _____ years

Native Language : _____

Highest level of education : ☐ Diploma ☐ Degree ☐ Masters ☐ PhD

Teaching experience : ☐ < 1 year ☐ 1-5 years ☐ 6-10 years ☐ >11 years

Part B: Blended teaching and learning experiences:

1. Can you tell me about a typical week for you, how many hours do you spend?

Teaching	:	☐ 1-5 hours	☐ 6-10 hours	☐ 11-15 hours	☐ > 16 hours
Preparing	:	☐ 1-5 hours	☐ 6-10 hours	☐ 11-15 hours	☐ > 16 hours
Marking	:	☐ 1-5 hours	☐ 6-10 hours	☐ 11-15 hours	☐ > 16 hours
Online MyGuru	:	☐ 1-5 hours	☐ 6-10 hours	☐ 11-15 hours	☐ > 16 hours

2. How many classes do you typically teach each semester of all subjects?

☐ 1-5 classes ☐ 6- 10 classes ☐ 11-15 classes ☐ > 16 classes

3. How many students do you have in a class, on average?

_____

4. How do you typically teach?

Reading : _____

Writing : _____

Listening : _____

Speaking : _____

Grammar : _____

5. Have you ever used blended learning pedagogy in any of your classes?

☐ Yes ☐ No

a) If you answered yes, how?

_____

_____

_____

b) If you answered no, why not?

☐ I don't know much about blended learning

☐ I have never had the opportunity to use blended learning in with my classes

☐ I know about blended learning, but do not feel comfortable with using technology

☐ I know about blended learning but do not feel comfortable with trying to implement it

☐ Other (Please explain):

_____

_____

6. As you know, this course can be blended with MyGuru.

i. How often do you logon to MyGuru:

☐ 1-5 times ☐ 6-10 times ☐ 11-15 times ☐ >16 times

ii. For what purpose do you usually logon to MyGuru?

☐ to upload materials

☐ to check students' assignments

☐ to monitor students' activities

☐ Other: _____

iii. What application(s) in MyGuru do you often use?

_____

_____

_____

**********THANK YOU**********

Siti Shuhaida Shukor,
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University of Warwick,

Teacher Questionnaire 2

WARWICK

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Part A: Please answer the questions below to the best of your ability. If you are in doubt about how to answer a question, please ask the researcher.

Statement	Strongly disagree	Somewhat disagree	Neither agree or disagree	Somewhat agree	Strongly agree
1. I felt pedagogically prepared to teach this course	1	2	3	4	5
2. I received the blended learning pedagogical support I needed during the course	1	2	3	4	5
3. I had enough influence on the course content and activities	1	2	3	4	5
4. There was a good balance between online and classroom activities	1	2	3	4	5
5. The online and classroom activities integrated well	1	2	3	4	5
6. I made an effort to integrate classroom and online activities with each other	1	2	3	4	5
7. I felt technically prepared to teach this course	1	2	3	4	5
8. I received the technical support I needed during this course	1	2	3	4	5
9. Using blended learning did not make this course more demanding to teach	1	2	3	4	5
10. I would like to teach other ESL courses using blended learning	1	2	3	4	5

11. My teaching style matches well with blended learning	1	2	3	4	5
Statement	**Strongly Disagree**	**Somewhat Disagree**	**Neither Agree nor Disagree**	**Somewhat Agree**	**Strongly Agree**
12. The online activities worked well	1	2	3	4	5
13. The classroom activities worked well	1	2	3	4	5
14. I received feedback on how to conduct my teaching	1	2	3	4	5
15. I did not face any difficulties while teaching in MyGuru	1	2	3	4	5
16. I managed to meet the learning objectives at the end of the course	1	2	3	4	5
17. I discussed with my colleagues regarding the teaching materials	1	2	3	4	5
18. I acted as a facilitator in MyGuru	1	2	3	4	5
19. I did not interact with students in MyGuru and only monitored them from afar	1	2	3	4	5
20. I consulted with my course coordinator regarding the activities on MyGuru and in classroom	1	2	3	4	5
21. I explained the course rules and regulations to students at the beginning of the course	1	2	3	4	5
22. I encouraged students to participate in classroom activities	1	2	3	4	5
23. I followed the guidelines provided by the university when implementing blended learning	1	2	3	4	5
24. I worked together with other colleagues when designing the course activities	1	2	3	4	5
25. I followed the course organisation as stated in the course guidelines	1	2	3	4	5

26. The university has provided training for the BL implementation	1	2	3	4	5
27. I attended the BL training sessions	1	2	3	4	5
28. I am aware of the requirements needed to implement a BL course	1	2	3	4	5
Statement	**Strongly Disagree**	**Somewhat Disagree**	**Neither Agree nor Disagree**	**Somewhat Agree**	**Strongly Agree**
29. The university monitored the activities in my BL course	1	2	3	4	5
30. I found students had actively participated during MyGuru activities	1	2	3	4	5
31. The classroom activities were successfully executed	1	2	3	4	5
32. The MyGuru activities were successfully executed	1	2	3	4	5
33. Students were more active during the classroom activities	1	2	3	4	5
34. Students were more active during the MyGuru activities	1	2	3	4	5
35. I prefer classroom activities more than MyGuru activities	1	2	3	4	5

Part B: Please rate each of the topic below

Statement	**Difficult**	**Somewhat difficult**	**Not easy or difficult**	**Somewhat easy**	**Easy**
36. Getting technical support was....	1	2	3	4	5
37. Managing the online activities was...	1	2	3	4	5
38. Managing the classroom activities was...	1	2	3	4	5
39. Integrating the online and classroom activities was....	1	2	3	4	5
40. Please add any other information you feel is important about your experiences teaching the course:					

Appendix B: Interview Questions

Student Semi-Structured Interview Questions:

1. Why are you studying in this course?
2. Would you recommend this course to a friend? Why?
3. Did you do all the activities in the course? Why or why not?
4. Do you feel this course had any advantages for the students? Which?
5. In which classes did you work most actively: when you were in the classroom of when you did online learning in MyGuru? Why?
6. Do you face any difficulties using MyGuru? Which?
7. In which classes did you work most actively@ When you were in the classroom or when you had online learning? Why?
8. Did you do all the online assignments? Why or why not?
9. What did you like the most about this course?
10. What did you like the least about this course?
11. Would you like to take more courses that use blended learning? Why?
12. If you could suggest changes to this course what would you suggest?
13. You have used MyGuru for several times this semester. Do you think it's enough?
14. Is there anything else you want to say about using BL via MyGuru that I have not asked?
15. Was there anything that you wanted to do that BL or MyGuru couldn't do? (For e.g, create your own post, etc)
16. How you feel now that you won't have to use blended learning for everyday use?
17. What is your role in the course?
18. What are other roles that you can identify in the course?
19. What do you expect to achieve at the end of this English Proficiency course?
20. Have you met your expectation(s) at the end of this course?
21. How do you know if you have achieved the learning outcomes for this course?
22. If you have not, how could you achieve the learning outcomes differently?
23. What is/are the problem(s) that you faced in order to achieve the learning outcomes?
24. Do you have difficulties to achieve the learning outcomes due to other activities? If yes, please explain.
25. Do you find solutions to the problems?
    a. If yes, how?
    b. If no, why?
26. What kind of applications in MyGuru that you used? *(E.g. Forum, messages, lecture notes links, etc)*

27. What is/are the purpose(s) of the applications? *(E.g. to do the group discussion, to share information, to download documents, etc)*
28. What other application(s) could you use in this activity?
29. How can the application(s) be used with other application(s)? (E.g. embed Youtube links in MyGuru)
30. How do you work with others in MyGuru?
31. How do you divide the work/task between other people?
32. Is/are there any rule(s) that you follow when completing your task?
33. How have MyGuru affected how you think and reason about your course exercises/assignments?
34. Do you find it hard to master MyGuru?
35. What platform(s) should have been easier?
36. How do you deal with problems in the exercises/assignments when they become too complex?
37. When things go wrong, how could MyGuru help you express these problems and request help?
38. How does MyGuru provide help to other?
39. Do you get proper guidelines/training how to use MyGuru?
    a. If yes, how?
    b. If not, why?
40. What you can do with MyGuru in completing your tasks/assignments?
41. Do you think MyGuru shape how you work?
    a. If yes, how?
    b. If not, why?
42. Do you think that you could use MyGuru differently with better support (if provided)?

Teacher Semi-Structured Interview Questions

1. What do you think about blended learning?
2. What do you think about the experience of creating a blended learning course?
3. What challenges did you face when creating activities and implementing this blended learning course?
4. Were there any activities in the course that you found difficult to create?
5. Do you feel this course has any advantages for the teachers?
6. Do you feel this course has any advantages for the students?
7. Do you feel this course has any disadvantages for the teachers?
8. Do you feel this course has any disadvantages for the students?
9. How would you describe the planning and preparation for this course?

10. What did you like the most about this course?
11. What did you like the least about this course?
12. Would you like to teach another blended learning course? Why or why not?
13. If you were to teach this course again, what would you change? Why?
14. How would you describe the amount of support available to you during the semester?
15. What impact do you think the blended learning had to your students?
16. If you had to use BL in the future, would you do so?
17. What technical issues have there been with using them?
18. How often do you use BL approach in other courses?
19. Do you think it is easier for the students to share their thoughts through BL approach?
20. Have you structured your lessons so that when during BL, the students will be able to get what they are supposed to learn during f2f instructions?
21. What do you think the students have learnt from MyGuru?
22. What do you think the students haven't learnt from MyGuru?
23. What is your role in the course?
24. What are other roles that you can identify in the course?
25. What do you expect to achieve at the end of this English Proficiency course?
26. Have you met your expectation(s) at the end of this course?
27. How do you know if you have achieved the learning outcomes for this course?
28. If you have not, how could you achieve the learning outcomes differently?
29. What is/are the problem(s) that you faced in order to achieve the learning outcomes?
30. Do you have difficulties to achieve the learning outcomes due to other activities? If yes, please explain.
31. Do you find solutions to the problems?

a. If yes, how?
b. If no, why?

32. What kind of applications in MyGuru that you used? *(E.g. Forum, messages, lecture notes links, etc)*
33. What is/are the purpose(s) of the applications? *(E.g. to do the group discussion, to share information, to download documents, etc)*
34. What other application(s) could you use in this activity?
35. How can the application(s) be used with other application(s)? (E.g. embed Youtube links in MyGuru)
36. How do you work with others in MyGuru?
37. How do you divide the work/task between other people?
38. Is/are there any rule(s) that you follow when completing your task?

39. How have MyGuru affected how you think and reason about your course exercises/assignments?
40. Do you find it hard to master/use MyGuru?
41. What application(s) should have been easier?
42. How do you deal with problems in the exercises/assignments when they become too complex?
43. When things go wrong, how could MyGuru help you express these problems and request help?
44. How does MyGuru provide help to other?
45. Do you get guidelines/training how to use MyGuru?

a. If yes, how?
b. If not, why?

46. What you can do with MyGuru in completing your tasks/assignments?
47. Do you think MyGuru shape how you work?

a. If yes, how?
b. If not, why?

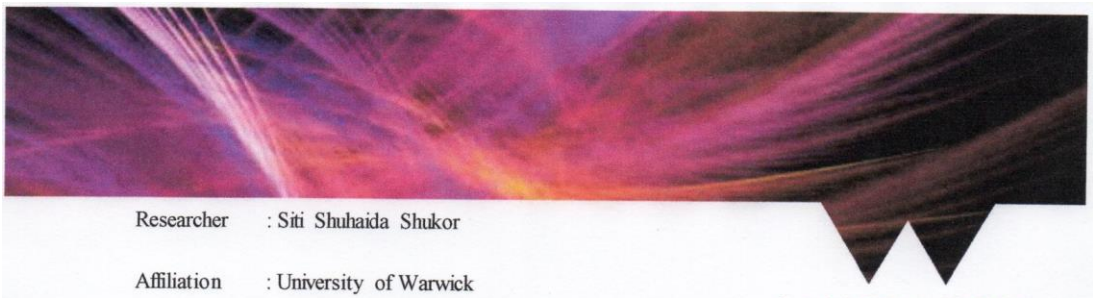
48. Do you think that you could use MyGuru differently with better support (if provided)?

MyGuru supporting Staff Semi-Structured Interview questions.

1. What is your role? Can you explain.
2. What do you think about blended learning using MyGuru?
3. How MyGuru was designed to integrate BL in teaching for the staff?
4. What kind of technology did you use?
5. Who designed/ are the people responsible in designing the platform?
6. What are the expectations from the teachers and students who use BL in their T&L?
7. Is/Are there any policy(es) suggested while designing the platform?
8. Is there any problem occurred throughout the designing process?
9. What do you think about the experience of developing a blended learning platform?
10. What challenges did you face when creating activities and implementing blended learning platform?
11. Were there any applications in the platform that you found difficult to create/use?
12. How would you describe the planning and preparation for this platform?
13. What did you like the most about the platform?
14. What did you like the least about the platform?
15. Would you like to design another blended learning platform aside MyGuru? Why or why not?
16. If you were needed to design this platform again, what would you change? Why?

17. How would you describe the amount of support available to you during the semester to the instructors/lecturers?
18. How would you describe the amount of support available to you during the semester to the students?
19. What impact do you think the blended learning platform had to the students?
20. What impact do you think the blended learning platform had to the teachers?
21. Do you provide any proper training for teachers/students before they use this platform for their blended learning?
22. Do you provide any handbook for students and educators for the blended learning implementation in the classroom?

Appendix C: Consent Forms



Researcher : Siti Shuhaida Shukor

Affiliation : University of Warwick

Centre for Education Studies

United Kingdom

Email : s.shukor@warwick.ac.uk

WARWICK

CENTRE FOR EDUCATION STUDIES

Brief Description of the Project

I am carrying out a research into blended learning in Malaysia and I would very much like to observe one of your classes in UPSI for my project. This will involve non participant observation of one of your face-to-face classes, observation of the Moodle site (MyGuru), an interview with you, a questionnaire and interview with selected voluntary students.

The observation will be carried out during selected lesson and participants will be interviewed out of the classroom. Meanwhile, a questionnaire can be completed by all participants at the convenience. All data will remain confidential and anonymous. May data collection is designed to avoid disruption of teaching and learning altogether.

I also hope my study might be of some use to the language instructors, students and also instructional designers in UPSI.

WARWICK

CENTRE FOR
EDUCATION STUDIES

CONSENT FORM

Project Title: Exploring blended language learning in the English Proficiency classroom at higher education institution in Malaysia.

I have had explained the purpose of the project and what will be required of me. I agree to the arrangements described in the Information Sheet in so far as they relate to my participation.

I understand that my participation is entirely voluntary and that I have the right to withdraw from the project any time.

Name:

Signed:

Date:

UNIT PERANCANG EKONOMI
Economic Planning Unit
Jabatan Perdana Menteri
Prime Minister's Department
Block B5 & B6
Pusat Pentadbiran Kerajaan Persekutuan
62502 PUTRAJAYA
MALAYSIA

Telefon : 603-8000 8000

Ruj. Tuan:
Your Ref.:

Ruj. Kami:
Our Ref. UPE 40/200/19/3361 (4)

Tarikh:
Date: 22 July 2016

Ms. Siti Suhaida binti Shukor
Universiti Pendidikan Sultan Idris
35900 Tanjong Malim
Perak
Email : S.Shukor@warwick.ac.uk

PROGRESS OF APPLICATION TO CONDUCT RESEARCH IN MALAYSIA

With reference to your application (details are as follows), I hereby acknowledge receipt of your application to conduct research in Malaysia. Your application is now complete and is being review by related agencies appointed by EPU. We require about a month to process this application before final decision is reached.

Researcher's Name	:	**SITI SHUHAIDA BINTI SHUKOR**
Passport No./I.C No.	:	[redacted]
Title Of Research	:	**"UNDERSTANDING BLENDED LANGUAGE LEARNING THROUGH THE LENS OF CULTURAL HISTORICAL ACTIVITY THEORY. A CASE STUDY OF MALAYSIAN HIGHER EDUCATION INSTITUTIONS."**

2. An approval letter will be issued to you as soon as the **Research Promotion and Co-ordination Committee, EPU** make their decision. You can collect the official approval letter at our office in Putrajaya.

Yours sincerely,

(NUHA HUDA HASSAN)
On behalf; Director General
Economic Planning Unit
Prime Minister's Department
62502 Putrajaya
Email: huda@epu.gov.my
Tel : 03 88723305
Fax : 03 88883798

WARWICK

CENTRE FOR
EDUCATION STUDIES

Mr. Sasigaran Moneyam

Director of Centre for Modern Languages,

Universiti Pendidikan Sultan Idris – UPSI

Pusat Bahasa Moden,

35900 Tanjong Malim,

Perak Darul Ridzuan.

RE: Permission to Conduct Research Study

Dear Mr. Sasigaran,

I am Siti Shuhaida Shukor, a Doctoral Researcher from the University of Warwick and I would like to request permission to conduct a study at your centre. Currently, I am doing my PhD project that focuses on blended language learning (BL) in higher education institutions.

My justification for choosing UPSI as my research context is because I am one of the educators in the institution itself and I would like to research a context from which I have a background understanding. I also hope my study might be of some use to the language instructors, students and also instructional designers in UPSI.

As a part of my studies, I would like to conduct an observation of BL in three different EP2 classrooms followed by a face-to-face interview and questionnaire. I have had some preliminary discussion with my colleagues about this and they were in principle keen to help.

Notwithstanding, observation will be carried out during selected lesson and participants will be interviewed out of the classroom. Meanwhile, a questionnaire can be completed by all participants at the convenience. All data will remain confidential and anonymous. May data collection is designed to avoid disruption of teaching and learning altogether.

I have discussed the project with my supervisor and been given ethical approval. Your approval to conduct this study will be greatly appreciated. I can speak by telephone or skype in case you have any concerns or further queries. Alternatively, you can also contact me at this email

address: s.shukor@warwick.ac.uk. If you agree for me to go ahead, can you email me at the address as aforementioned.

Your consideration and assistance are highly appreciated. Thank you.

Sincerely,

Siti Shuhaida Shukor

Doctoral Researcher

University of Warwick

Enclosures

Cc: Associate Professor Dr. Michael Hammond,

Director of Research Students,

Centre for Education Studies,

University of Warwick.

Cc: Associate Professor Dr. Nor Azmi bin Mostafa,

Dean,

Faculty of Languages and Communication,

Universiti Pendidikan Sultan Idris.

Approved by: Date:

_____ _____

Mr. Sasigaran Moneyam

Appendix D: Normality Tests

Skewness and Kurtosis of Normality Test (Student Questionnaire 2)

Descriptive Statistics					
	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
19. MyGuru materials were not well organised	294	-.091	.142	-.736	.283
Valid N (listwise)	294				

Meanwhile, from the second test, skewness value (-0.91) falls between 2 and -2, while Kurtosis value (-.736) falls between 7 and -7 indicated a normal tabulation.

Table 108: One-Sample Kolmogorov-Smirnov of Normality Test (Student Questionnaire 2)

		25. There were varieties of activities in MyGuru
N		294
Normal Parameters[a,b]	Mean	3.37
	Std. Deviation	.972
Most Extreme Differences	Absolute	.247
	Positive	.168
	Negative	-.247
Test Statistic		.247
Asymp. Sig. (2-tailed)		.000[c]

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

Lastly, the KS test shows the significant value is > .05 which indicated the data are normally distributed.

Table 109: Skewness and Kurtosis of Normality Test (Teacher Questionnaire 2)

Descriptive Statistics					
	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
2.I received the BL pedagogical support I needed during the course	16	.054	.564	-.764	1.091
Valid N (listwise)	16				

Meanwhile, from the second test, skewness value (0.54) falls between 2 and -2, while Kurtosis value (-.764) falls between 7 and -7 indicated a normal tabulation

Table 110: One-Sample Kolmogorov-Smirnov of Normality Test (Teacher Questionnaire 2)

		8.I received the technical support I needed during this course
N		16
Normal Parameters[a,b]	Mean	3.56
	Std. Deviation	1.209
Most Extreme Differences	Absolute	.329
	Positive	.171
	Negative	-.329
Test Statistic		.329
Asymp. Sig. (2-tailed)		.000[c]

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

Finally, the KS test shows the significant value is > .05 which indicated the data also are normally distributed. Therefore, the analysis using Weighted Mean and Standard Deviation is accepted due to the findings of the normality test for both questionnaires.

Appendix E: Interview Codings

The summary of the final codes were shown as follows:

Finalised Codes of Student Interviews

Activity Theory Elements	Themes	Sub-themes	Dimensions	P	M
Tool	Affordances	Efficiency of resource	Communicating information	11	19
			Time/Money-saving	6	10
			Recycle materials	2	1
			Lack of reliable reading materials	1	1
		Extend classroom	Continuous learning	5	6
		Multimedia	Interaction	3	5
	Characteristic Features	Dependency on the Internet	Internet breakdown	11	18
			Server breakdown	8	10
		Asynchronous	Delayed/ no response	7	11
		Non-f2f	No physical presence	5	7
	Accessibility	Access	Internet	5	5
			Hardware and technical	4	4
		Design	Weaknesses	9	17
			Strength	7	10
	Other tools	Types		8	13
		Purposes		5	5
Subject	Behavioural	Instrumentation		2	3
	Affective and emotional state	Acceptance		13	25
		Mindset/ Perceptions		2	2
		Scared		1	2
	Cognitive skills and abilities	Knowledge and skills		8	13
	Motivation to learn English	Extrinsic	Surface learner	9	20
		Intrinsic	Deep learner	8	15
	Motivation to	External		1	1

Activity Theory Elements	Themes	Sub-themes	Dimensions	P	M
	use MyGuru				
	Orientation to learning persistence	Proactive in finding solutions		14	49
		Procrastinator when seeking help		5	7
		Demotivated when facing problems		2	3
Object	Addressing instrumental goals			13	65
	Developing a communicative competence			11	22
Rules	Syllabus	Contents		10	12
		Inflexibility		4	8
		Progression		3	4
	Policy on MyGuru	Requirement		2	2
	Policy on EP courses	Requirement		4	5
Division of labour	Students	Inter-role	Task division on assignments	7	28
			Interaction	8	16
		Intra-role	Responsibilities	6	6
Community	Teacher community	Roles	Teaching	9	13
			Giving instructions	7	12
			Displaying pleasant manners	6	3
			Giving feedback (on MyGuru)	3	2
			Providing help (with MyGuru)	2	2
	MyGuru support staff community	Assistance	Training	9	13
			Support	2	2
Outcomes (Students)	Behavioural	Usage		14	31
		More spoken text communication		5	5
	Affective	Boost self-		5	7

Activity Theory Elements	Themes	Sub-themes	Dimensions	P	M
		confidence			
	Cognitive	Challenged to think		7	10
		Developed language skills		5	7
		Developed IT skills		2	2
	Challenges	English language		9	15
		Time constraint		7	14
		Propensity to copy and paste		5	8
		Some skills difficult to address		5	7

Finalised Codes of Teacher Interviews

Activity Theory Elements	Themes	Sub-themes	Dimensions	P	M
Tools	Affordances	Extend classroom	Continuous learning	5	13
			Learning at own pace	4	7
		Multimedia	Interaction	4	5
			Fun learning environment	3	4
			A new environment for T&L	2	2
		Efficiency of resource	Communicating information (Time/Money Saving)	3	8
			Recycling materials	1	2
	Characteristic Features	Dependency on the Internet	Internet breakdown	6	11
			Server breakdown	4	4

Activity Theory Elements	Themes	Sub-themes	Dimensions	P	M
		Non-f2f	No physical presence	3	5
		Asynchronous	Delayed response	2	4
		Synchronous	Prompt feedback through online exercises	2	2
	Accessibility	Access	Hardware/ Technical	4	4
			Internet (SES-affordability to serve to the internet)	1	1
		Design	Weaknesses	3	8
			Strength	1	2
	Other online tools	Types		5	7
		Purposes		5	5
Subject	Behavioural	Knowledge and skills		4	14
		Attitudes		4	8
		External Drives		3	4
	Affective	Emotions		6	7
		Acceptance		4	6
	Motivation to teach English	Intrinsic		7	15
		Extrinsic		3	4
	Motivation to use MyGuru	Intrinsic		2	2
	Orientation to development	Proactive in finding solutions		2	3
		Demotivated when facing problems		1	4
		Procrastinator when seeking help		1	1
	Teaching structures			3	5
Object	Keeping a Pragmatic			6	13

Activity Theory Elements	Themes	Sub-themes	Dimensions	P	M
	Orientation				
	Developing a communicative competence			5	6
	Addressing instrumental goals			2	3
Rules	Syllabus	Grammatically focused		4	6
		Appropriate, engaging syllabus		4	4
		Questioning suitability (levels)		3	5
		Questioning suitability (Contents)		3	3
		Questioning of the syllabus (assessments)		1	2
	Policy on MyGuru	Requirement		5	15
		No clear guidelines on using BL		5	13
		Outdated manual		1	1
Division of labour	Role of teachers	Fulfilling teaching requirements		7	49
		Becoming course coordinator		7	15
		Attending training for CPD		6	9
		Managing time		5	11
Community	Teacher community	Sources of help (with MyGuru)		4	7
	Student community	Roles	Follow syllabus	5	6
			Give feedback	5	7
		Differentiated natures	Orientation to learning	7	14

Activity Theory Elements	Themes	Sub-themes	Dimensions	P	M
			Motivation to learning English	5	8
		Comfortable with ICT	Access	4	7
			Skills	4	6
	MyGuru support staff community	Assistance	Support	6	19
			Training	6	8
Outcomes (Teachers)	Behavioural	Used MyGuru		7	26
		Extend use		5	9
		Preparation of teaching		1	4
	Affective	Felt BL as a burden due to technical error and workloads		4	4
	Cognitive	Challenged to rethink teaching		1	2
		Trigger to consider students' different levels		2	2
		Not challenged to rethink teaching		1	1
		Professional development		1	2
	Achievement / Performance	No guidelines to measure online performance		2	2
	Shortcomings	Lack of technology skills		3	5
		Time constraint		4	4
		Little influence over the syllabus/design		3	4
		Difficult to cater to different levels		1	1
		Technical issues (reliability)		1	2
		Difficulty in explaining online		1	1
		No communication		1	2

Activity Theory Elements	Themes	Sub-themes	Dimensions	P	M
		between teachers online			
Outcomes (Students)	Behavioural	More spoken text communication		2	6
		Better prepared (Ready in advanced)		4	12
	Affective	Boost self-confidence		2	4
		Reduce anxiety/stress levels		1	1
		More open in sharing opinions		1	1
	Cognitive	Students were more familiar with the use of gadgets		1	1
		Students liked BL for extra exercises		1	1
	Achievement / Performance	Developed particular skills-reading, writing, and oral fluency		3	4
		Helped achieve in tests		2	3
		Helped meet learning objectives/ expectations		1	2
	Shortcomings	Some skills difficult to address		3	4
		Too dependent on the teachers		1	1
		The propensity to copy and paste		1	1

Finalised Codes of Staff Interviews

Activity Theory Elements	Themes	Sub-themes	Dimensions	P	M
Tool	Affordances	Efficiency of resource	Time, money and physical resource savings	1	6
		Multimedia	Interaction	1	2
		Extending teaching	Preparation in advance	1	1
	Development	Skills		2	3
		Keeping up with technology advancement		1	2
	Characteristic Features	Dependency on the Internet		1	1
		Non-f2f		1	1
	Accessibility	Design		1	1
Subject	Behavioural	Developing		2	4
	Cognitive	Knowledge of BL		1	3
Object	Keeping pragmatic goals			2	10
Rules	Procedures for improvement of MyGuru			2	15
Division of labour	Inter-role	Task division		2	3
	Intra-role+	Responsibilities		2	3
Community	MyGuru users (teachers and students)	ICT skills		2	5
		A source of feedback		2	3
		Acceptance		2	3
Outcomes	Carried their duties as expected	Had the system up and running New staff trained A system in place for improvement Aware of the shortcomings of MyGuru system		2	2